How to Conduct Satisfaction Surveys

A Practical Guide to Conducting Surveys within Alberta's Basic Learning System

Prepared by
HarGroup Management Consultants, Inc.

April 2004

Alberta
LEARNING

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ALBERTA LEARNING CATALOGUING IN PUBLICATION DATA

HarGroup Management Consultants, Inc.
How to conduct satisfaction surveys : a practical guide to conducting surveys within Alberta's Basic Learning System.

ISBN 0-7785-2599-6

1. Educational surveys - Alberta. 2. Social surveys - Alberta.
I. Title. II. Alberta. Alberta Learning. Performance Measurement and Reporting Branch.

LB2823.H279 2004 379.154

- ✓ *Improving education*
- ✓ *Identifying priorities*
- ✓ *Guiding decisions*
- ✓ *Addressing needs*
- ✓ *Enhancing communication*

Throughout Alberta, school systems are increasingly gathering feedback and perspectives from beneficiaries and stakeholders of the learning system. By increasing communication and listening to ideas and opinions, school systems who conduct survey research are gaining greater insight into the ideas, attitudes, and opinions of the Albertans they serve. By conducting satisfaction research, education providers are becoming better prepared to address the needs and expectations of Alberta students, parents and teachers.

This reference guide has been designed to assist education providers to plan, design and implement satisfaction surveys. There are a variety of methods and techniques that can be employed to conduct surveys. All have merits and drawbacks to consider when deciding how to implement a survey. The information presented in this reference guide is intended to help those who are involved in satisfaction surveys within Alberta's learning system.

School jurisdictions and schools within Alberta are required to develop education plans that incorporate performance outcomes and measures. Often, these outcomes and measures are related to the satisfaction of parents, students, staff and other community members. The information presented in this reference guide can be used to help school jurisdictions and schools plan and implement surveys to measure satisfaction within these constituent groups.

It is worth noting that Alberta Learning conducts annual satisfaction surveys with students, parents and the public. The questions asked in these surveys can be found on the Internet at

http://www.learning.gov.ab.ca/educationsystem/planning.asp.

Several school authority representatives (10) in Alberta participated in a survey that provided valuable information for this reference guide. Their input and suggestions has been incorporated in this guide and practical examples are highlighted. HarGroup Management Consultants, Inc. is grateful to these representatives and acknowledges their constructive and valuable suggestions.

Inquires regarding conducting satisfaction surveys should be directed to:

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Why Measure Satisfaction

Satisfaction research can enrich and enhance decision making processes by providing various stakeholders (students, parents, teachers and citizens) an opportunity to provide their perspectives on the quality of Alberta's learning system. By understanding what stakeholders think about the system and how it serves the community, education providers can make improvements to more effectively address their priorities, values and ideas.

Education providers typically have many opportunities to gather feedback from stakeholders of the learning system. Jurisdiction or school representatives can speak directly to students in school hallways or at student union meetings. Parents can provide feedback at parent/teacher meetings or other organized events. Teachers can express their opinions at curriculum meetings or face-to-face discussions with administrators. Citizens can attend school board meetings and present opinions about how the learning system is perceived in the community. All of these feedback mechanisms provide opportunities for stakeholders to express their views and opinions, and help jurisdictions and schools determine priorities to meet the expectations of the community. A satisfaction survey is another tool that enables jurisdictions and schools to understand stakeholder perspectives. The advantage of a survey is that it enables measurement of the perspectives of all who are being served by the learning system.

Most school boards and schools within Alberta's learning system already use satisfaction surveys to address and understand a variety of critical issues. For example, satisfaction surveys are used to plan education programs, examine use of technology in schools, and measure students' safety and security within and outside of school. Satisfaction surveys are also conducted by school boards and schools to address the specifications of the Alberta Government Accountability Framework, which is an ongoing process that enables school boards to implement continuous improvement initiatives (Alberta Learning publishes a *Guide for School Board Planning and Results Reporting*).

Satisfaction surveys also help school boards and schools to track and analyze stakeholder feedback over time, thus enabling them to identify and understand changes in stakeholder perspectives. Some school boards and schools conduct annual satisfaction surveys with various stakeholder groups. Others survey target populations at regular intervals (e.g students from Grades 4, 8 and 12 are surveyed every three years). Whichever approach is used, school boards and schools can analyze the data over time to identify changes in perceptions, priorities and expectations.

Who Should be Surveyed

School boards and schools in Alberta conduct satisfaction surveys with a variety of populations. Most notable are the direct beneficiaries of the learning system such as students and parents or guardians of students. Other beneficiaries can be included in satisfaction surveys, such as employers within the school jurisdiction and the general citizenry. These latter stakeholder groups receive indirect economic and social benefits from the learning system such as a skilled workforce, citizenry prepared to contribute to society, etc.

Service providers may also be targeted in satisfaction measurement processes. Teachers, administrators, and school board members are often surveyed about job satisfaction, education delivery, infrastructure priorities, use of technology, etc.

Conducting Satisfaction Surveys - 5 Phases

The survey process is commonly conducted in five key phases, which are broadly presented in the diagram on the next page. All phases are important to the overall success of the satisfaction measurement process. Each survey project undertaken in Alberta's learning system will be distinct and may include all or some of the issues presented in the diagram, but most will follow this framework.

The first two phases involve planning the survey process and designing the tools and instruments that will be used in the survey. These phases of the process directly impact the remaining phases and should be given careful consideration. For example, if a survey objective is not identified in the first phase (and subsequently questions are not designed to address the issue in the second phase), it may be impossible to address the issue once the third phase (administration of the survey) is complete.

The third and fourth phases encompass conducting the survey with stakeholders, analyzing the results, and communicating the results to interested individuals or groups. The logistical steps in conducting the survey will depend on the method of data collection selected for the survey. For example, in a web-based survey, respondents may be invited to participate in the survey by receiving an e-mail invitation or receiving a letter that invites them to participate. Conversely, in a telephone survey interviewers contact respondents and verbally invite them to participate in the survey.

Survey data will also need to be organized and assembled for analysis such as recoding and collapsing data into categories, preparing data tables, and using subgroup analysis to determine whether different respondent groups have similar or distinct opinions about issues. The survey findings should be organized and presented in a report that interested individuals or groups can use.

In the final phase, education providers are encouraged to develop and implement initiatives, or adjust existing policies and programs, based on the survey results. In some cases, the survey results may suggest that the school board or school is addressing the expectations and priorities of stakeholders. Alternatively, the results may identify specific issues that need to be addressed by the school board and the school.

As a final task, jurisdictions and schools should consider the successes and challenges associated with the survey process and identify ways that may improve future surveys.

Figure 1 - Phases of a Satisfaction Survey

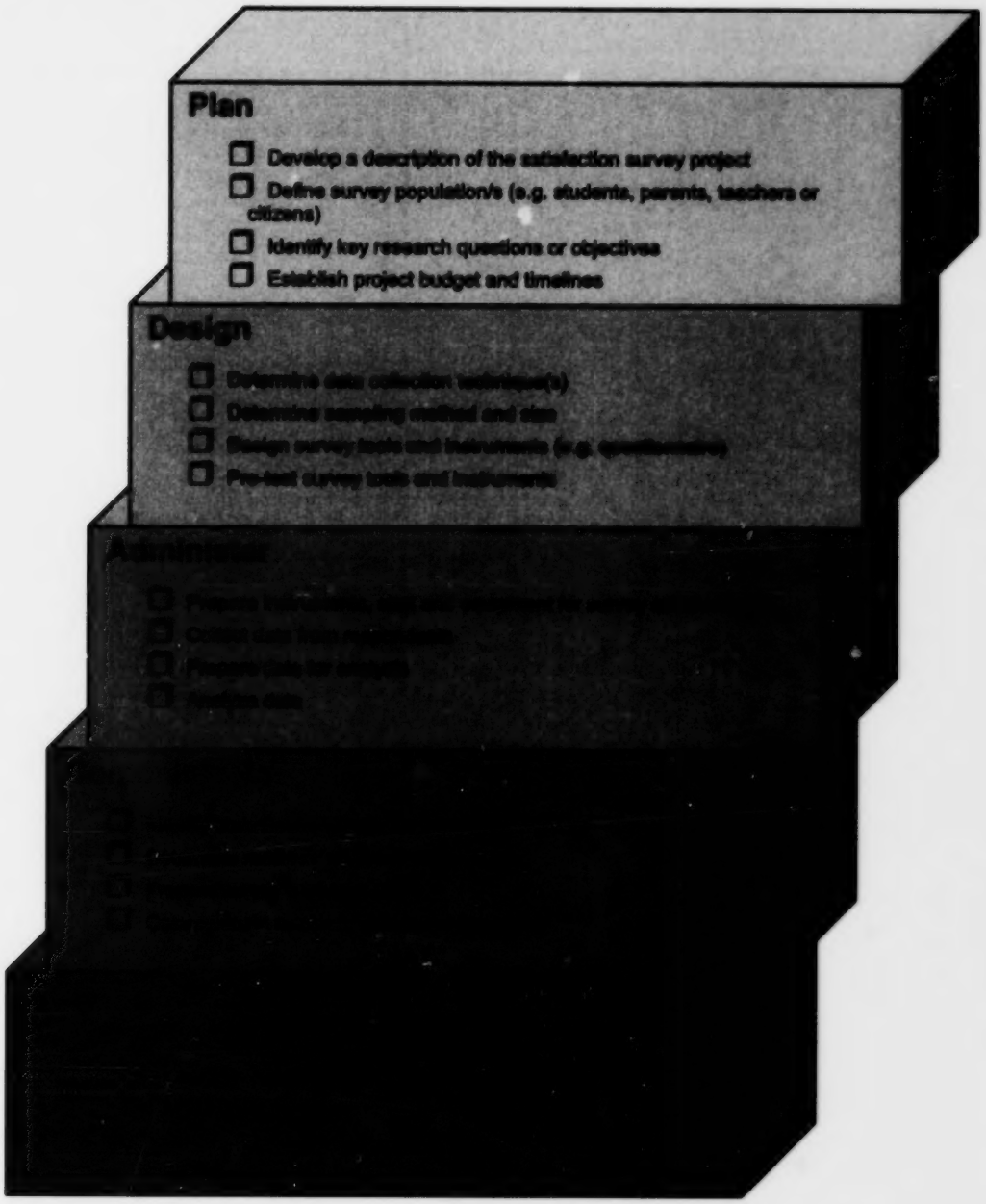
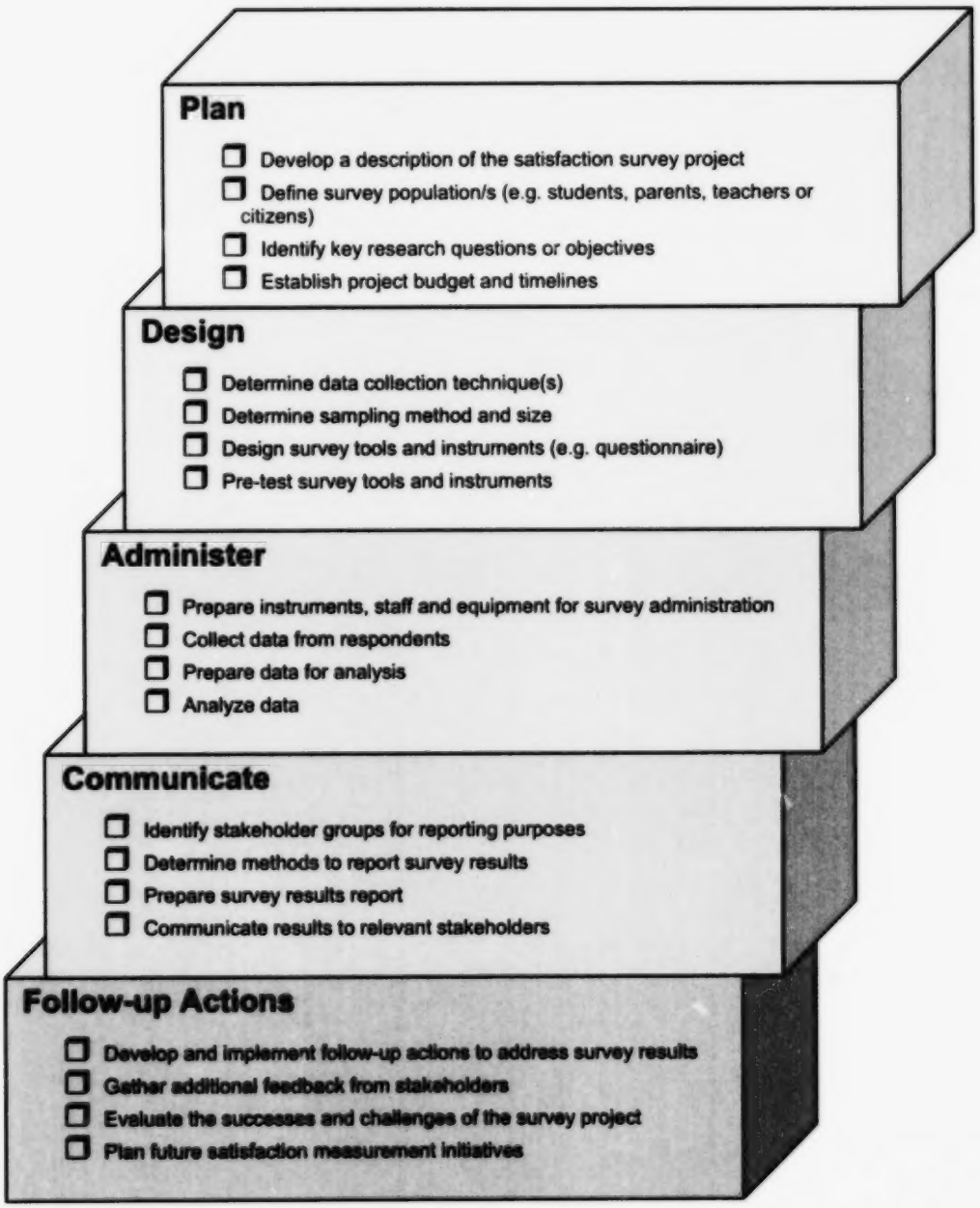

Plan
Develop a description of the satisfaction survey project
Define survey population/s (e.g. students, parents, teachers or citizens)
Identify key research questions or objectives
Establish project budget and timelines
Design

Figure 1 - Phases of a Satisfaction Survey


Plan
Develop a description of the satisfaction survey project
Define survey population/s (e.g. students, parents, teachers or citizens)
Identify key research questions or objectives
Establish project budget and timelines
Design
Determine data collection technique(s)
Determine sampling method and size
Design survey tools and instruments (e.g. questionnaire)
Pre-test survey tools and instruments
Administer
Prepare instruments, staff and equipment for survey administration
Collect data from respondents
Prepare data for analysis
Analyze data
Communicate
Identify stakeholder groups for reporting purposes
Determine methods to report survey results
Prepare survey results report
Communicate results to relevant stakeholders
Follow-up Actions
Develop and implement follow-up actions to address survey results
Gather additional feedback from stakeholders
Evaluate the successes and challenges of the survey project
Plan future satisfaction measurement initiatives

A Checklist for Survey Projects...

The following checklist provides a broad overview of elements that should be considered before, during and at the end of survey research projects. Each project will be distinct and may include all or some of the issues presented in the checklist.

Getting started ...

- ❒ Has the business need for the survey research been established and articulated (e.g. how does the survey relate to an education plan)?
- ❒ Has a Survey Plan been developed (survey description, objectives, target populations, methodology, use of external contractors, timelines, deliverables, budget requirements, communications, reporting, and use of results)?
- ❒ Does the survey project have appropriate approvals (e.g. School Board, Superintendents, etc)?
- ❒ Has a Request for Proposal been developed within established guidelines and with relevant project information and specifications (to distribute to external contractors)?
- ❒ How will external contractors be selected (open competition, single source, or selected competition)?
- ❒ Have proposals from external contractors been rigorously evaluated and approved?
- ❒ Has a formal contract been signed by external contractors and jurisdiction or school representatives?

During implementation...

- ❒ Are data collection methods appropriate for the target populations and project circumstances?
- ❒ Have staff who deal with the public been informed about the survey so that they can answer telephone inquiries about it?
- ❒ Has the sample plan been given adequate consideration?
- ❒ Have the survey instruments been designed effectively and field tested?
- ❒ Have quality control measures been established and employed in the survey administration?
- ❒ Are the specifications of the *Freedom of Information and Protection of Privacy Act* being maintained?
- ❒ Have the survey data been adequately analyzed?
- ❒ Does the survey report identify the business need, describe the methodology, provide a respondent profile and present factual findings obtained in the research?

Project completion ...

- ❒ Has the project manager adequately evaluated the survey research project, identifying strengths and weaknesses and suggesting recommendations for future research?
- ❒ Have the deliverables been approved by the person/s responsible for the survey or senior administration?
- ❒ Have the results of the research been communicated to the appropriate stakeholders and constituents (both internal and external)?
- ❒ Have the survey results (raw data and reports) been sent or submitted for data storage or external distribution?
- ❒ Have the survey report and data been appropriately warehoused and stored within Alberta Learning protocols and *Freedom of Information and Protection of Privacy Act* specifications?

Planning a Satisfaction Survey

Every survey project should have a plan that presents key information about the project. The plan will help those engaged in survey research to organize the tasks required to successfully design and execute the satisfaction measurement process. It will also help to inform others within the school board or school about the satisfaction survey, its purpose, the process and how the results might contribute to the overall decision making process or education plan of the school board or school. As well, a documented survey plan can facilitate continuity and clarity if the survey is conducted on an annual basis.

The survey plan should show a clear relationship between the survey results and the decisions that will be made, the information need, the methodology to be implemented, and the reporting.

❒ *Develop a description of the satisfaction survey project*

The description should portray the intent, context, and scope of the satisfaction survey.

When preparing a description of the satisfaction survey, those involved in the survey should organize basic ideas and concepts for what the survey is about, who is involved and when it will be conducted. A description of a satisfaction survey will typically include the following:

- Identify the sponsor of the survey (for whom the survey is being conducted - e.g. school board, school, etc.).
- Identify the information need (why is the survey being done and how the results will support planning/decision cycles).
- Determine the issues that need to be resolved.
- Set priorities for issues that will be addressed in the survey.
- Identify an individual within the organization as the primary contact for the survey. This individual should be accessible to respondents who may have questions about the satisfaction survey.
- Determine the project deliverables - data tables, written reports, presentation formats (web-based, paper, or electronic files), etc.
- Determine whether outside assistance is needed to support the survey process (consultants, research firms, technology contractors, printing companies, etc.). See Appendix A for information about contracting outside consultants.

School authorities in Alberta use outside assistance to help with all or parts of the survey project.

❒ *Define Survey Population*

The survey population represents the complete group of persons (can also be objects, businesses, units, etc.) to which the survey results will be generalized.

- Identify target populations for the research. In the context of the learning system, these may include:
  - Students
  - Parents
  - Teachers
  - Administrative staff
  - Custodial staff
  - School Board Members
  - Superintendents
  - Stakeholders
  - Citizens
  - Employers
- The overall satisfaction survey project may involve all or some of the target populations identified above.
- Determine or estimate the size of the target populations. The size of the population will be needed if a sample of the population is contacted to participate in the survey.
- Identify factors or characteristics of the target population that might limit the ability to contact members of the population (e.g. lack of direct contact information for parents, vacation schedules, access to computers, etc.), and address them to minimize bias in the survey results.

Ten Alberta school authorities were asked which grade levels they survey in their satisfaction projects. Most surveyed three grade levels (e.g. grades 4, 8 and 12) in any given year. Few school boards survey students in ECS or grades 1, 2, and 3.

❒ ***Identify key research questions or objectives***

- Establish a set of key research questions or survey objectives to specify the purposes for which information is required.
  - Identify the issues, problems and hypotheses to be tested in the satisfaction survey.
  - Ensure that potential users (decision makers, staff, etc.) can understand what issues the survey research addresses.
  - Develop survey objectives in partnership with decision makers and stakeholders.
  - Ensure that objectives are clear and concise.
  - The final results of the satisfaction survey should address the survey objectives that are established.

Survey objectives are statements that clearly describe what you want to learn or understand from the survey results.

❒ *Establish Project Budget and Timeline*

- Determine the timelines for the project including milestones for key phases and the completion deadline. The following is a simple illustration of a survey project schedule showing tasks and timelines. A survey project may require more details to identify specific tasks and responsibilities for various individuals or staff members involved.

Survey Project Schedule:	Week											
Task:	1	2	3	4	5	6	7	8	9	10	11	12
Prepare survey objectives and budgets	❖											
Design survey methodology and sample plan	❖											
Design survey instruments		❖										
Pre-test survey instruments				❖								
Prepare and send out survey questionnaires					❖							
Respondents complete and return questionnaires					❖			❖				
Clean and analyze data									❖			
Prepare reports										❖		
Communicate results to relevant stakeholders											❖	
Develop action plans to address survey results												❖
Key Milestones: ❖												

- In many cases, the survey project may not be conducted in sequential or linear steps. Survey administrators should anticipate when various activities might be undertaken within a survey project and plan appropriate completion dates for each activity. For example, programming of scanning technology might occur during the data collection phase so that completed questionnaires can be scanned immediately following the data collection deadline.

- When estimating survey project costs, schools and school boards should consider both out-of-pocket financial costs and non-dollar or indirect costs. Some of the survey costs that estimators might need to consider include:

  - Internal staff - the time and wages of internal staff to organize and implement the survey project.
  - Travel - internal staff may be required to travel for the survey project (e.g. visiting schools, attending meetings, etc.).
  - Printing - preparation of paper questionnaires, reports, and other related materials.
  - Communications - may include printing, postage, telephone rentals and long-distance, couriers, presentations, etc.
  - Data capture and processing - costs may be incurred from purchasing specialized computer software (or contracting data capture and processing to outside organizations).
  - Supplies and equipment - basic supplies such as pencils, pens, paper, and envelopes may be needed. Special equipment such as computers, projectors, easels, etc. may be needed to implement the survey and present the results.
  - Outside consultants - all or part of a satisfaction survey project may be contracted to outside consultants. Consultants commonly charge rates on a per diem basis or as a fixed rate for completing a contracted service. The next section of this manual examines issues related to engaging outside consultants.

Cost-savers:
- *Use local specialists for data collection*
- *Assign clerical staff to perform non-technical, routine tasks*
- *Refer to existing survey instruments*
- *Borrow whenever possible (equipment, staff, materials and supplies).*

❒ *Contracting Outside Contractors/Consultants*

Outside research contractors/consultants are sometimes engaged to assist in designing and executing a survey project, or conducting a specific component of the project.

There are typically three methods of sourcing and selecting outside consultants:

- *Open Competition by Advertisement* - Service requirements are advertised to the general public and all interested parties are invited to submit a proposal (e.g. advertisements in newspapers). This method can often result in a large number of proposals being submitted for review.

- *Single Source Selection* – Only one contractor/consultant is invited to submit a proposal for the provision of services. Generally, organizations should have a compelling reason for using this selection process (e.g. only available supplier, limited budget, etc.). It is important to ensure that the contractor/consultant has appropriate qualifications and experience to conduct the project, if this method is chosen.

- *Select Competition by Resource List* - Specified contractors/consultants are invited to respond to a Request for Proposal. At least 3 to 5 contractors/consultants should be invited to respond. A resource list can be developed by contacting other jurisdictions to determine which survey research firms they use, or by contacting Alberta Learning. It should be noted that some contractors may not submit proposals for projects; therefore organizations may want to invite more than 3 contractors to obtain at least 3 proposals for consideration.

i. Request for Proposals

Solicitation for services can be conducted through a Request for Proposal (RFP) process. A RFP is a solicitation method used to seek survey project management plans and proposed costs from external contractors.

Develop Request For Proposals

A Request for Proposals (RFP) is a document used to notify potential contractors that a project is about to be initiated, and the organization is interested in receiving proposals, or bids, from interested external contractors. The RFP usually provides requirements and specifications about the survey project and requirements of the external contractors in conducting services.

The RFP provides potential contractors with information needed to prepare and submit a proposal to provide research services. Information contained in the RFP will generally include contact information, specifications regarding the proposals submitted, and some background information regarding the project. Contractors will review the RFP to determine whether or not they feel they can take on the project, and whether or not to submit a proposal to offer services.

A Request for Proposal (RFP) should include:

- ❒ Project background, information and description.
- ❒ Survey objectives.
- ❒ Use of survey results.
- ❒ Technical specifications of the survey.
- ❒ Timing of the project.
- ❒ Project deliverables and ownership of results.
- ❒ Proposal requirements.
- ❒ Proposal evaluation, contract negotiations and award specifications.
- ❒ *Freedom of Information and Protection of Privacy Act* specifications (see Section 4.3).
- ❒ Response instructions.
- ❒ Period of proposal commitment (e.g. 30 days following the submission date).

The RFP may include attachments such as detailed survey plans, previous years' questionnaires/reports, draft survey instruments, resources available for the project and other materials.

ii. Proposal(s) Evaluation and Contract Development

Organizations and/or satisfaction survey committees should develop factors to rate proposals, assign weights to criteria, and finalize evaluation forms. In the case of a satisfaction survey committee, members usually review the proposals individually and then meet to discuss and arrive at a consensus rating for each proposal.

Evaluate Proposals and Select External Contractor

There are a number of issues to consider when assessing the competence and suitability of an outside contractor/consultant for a specific satisfaction survey project. The following list provides a basic checklist for selecting an outside contractor:

- ❒ Does the proposal exhibit an understanding of the project and its requirements?
- ❒ Is the proposed methodology sound?
  - Does the proposal provide a high probability of accomplishing the study objectives?
  - Is the accuracy of the data ensured?
  - Is the reliability of the data ensured?
  - Is the approach/methodology based on sound research design principles?
  - Is there enough flexibility to ensure success if project parameters change?
- ❒ Are project timelines and costs reasonable and within specifications?
- ❒ Does the contractor have the technical expertise and experience to fulfill the project?
- ❒ Does the contractor have the resources to complete the project?
- ❒ Other criteria may also be needed depending on specifications of the project.

A template and example of an evaluation form are presented in Appendix A.

The successful external contractor should be informed of the outcome of the selection process and offered a contract for service. Unsuccessful contractors should be notified that their proposals were not selected for the project.

Designing the Survey

There is no one best method to use when conducting satisfaction surveys. What may work best for one school board or school may not be the best approach for another. Selecting methods to conduct a satisfaction survey will depend on several factors such as the type of information that is needed from the survey, the targeted population, ease of contacting respondents, and the financial and resource costs to carry out a survey.

This section of the manual provides organizations with guidelines and specifications to consider when deciding which survey design methods to employ.

❒ ***Determine data collection technique(s)***

In choosing an optimal data collection method for the survey, the nature and requirements of the information should be considered. The survey population will also influence the data collection method chosen (how can the population be contacted and surveyed). It is important to consider these factors in detail, as the data collection method can substantially impact the quality of information obtained by the survey.

The types of data collection methods commonly used by school boards and schools within Alberta's learning system include (presented in order of frequency of use by school boards and schools):

Commonly used to survey:
- Students
- Parents
- Teachers

- *Mail survey* - (a self-administered survey) questionnaires are sent to respondents through the mail (or some other delivery method) and asked to complete the form and return it. There are variations of the mail survey approach that might not use postal mail. For example, teachers could provide students with a questionnaire to complete in class. The students complete the questionnaire and return it to the teacher in a sealed envelope. Another example might involve students taking questionnaires home for their parents to complete. After the parents have completed the questionnaire, they put it in a sealed envelope and their children take it back to the school to give to the teacher (or return to some other drop off system). In interviews with Alberta school authorities, the mail survey technique was the most common technique used to survey students, parents and teachers.

Becoming a commonly used survey method:
- Students
- Teachers
- Parents

- *Web-based survey* - (a self-administered survey) respondents are asked to interact with a computer and enter their responses in the questionnaire form by using a keyboard or touching a computer screen. Some schools have used this method when surveying students, teachers and parents. Schools have organized time schedules so that students can use computer labs to access computers and complete the survey. Teachers have been invited to complete questionnaires at a computer terminal available in the school. Some schools have sent out questionnaires to parents with students, but offered parents the option to complete the questionnaire on-line (in most cases, this has had limited success). Some organizations are employing innovative approaches to encourage parents to participate in satisfaction surveys using web-based questionnaires. For instance, parents are encouraged to visit a school's computer lab prior to the annual parent/teacher interviews to complete a questionnaire on-line.

Might be used to survey:
- Parents
- Employers
- Citizens

- *Telephone survey* - (an interviewer administered survey) trained interviewers contact respondents by telephone and administer the interview. Interviewers ask respondents questions and record responses on paper or computer-aided telephone interview forms. The telephone survey has been used to conduct satisfaction surveys with parents, local employers and the public. Typically, this survey technique has not been employed with students or teachers because these groups are mostly captive audiences within the learning system and can be efficiently interviewed through the mail or web-based survey techniques (as presented above).

Might be used to survey:
- Parents
- Employers
- Younger students

- *In-person survey* - (an interviewer administered survey) trained interviewers administer the interview in-person at respondents' homes, offices, schools, etc. The interviewer is responsible for asking questions and recording responses on paper or computer-aided interview forms. This survey technique is not commonly used to conduct satisfaction surveys within Alberta's learning system. Yet, it may present some advantages when attempting to administer complex questionnaires to respondents or interviewing younger students for a satisfaction survey (e.g. grades 1 to 3)

In some satisfaction survey projects, combinations of the data collection methods presented above have been employed (e.g. a mail survey conducted with parents and web-based surveys with students and teachers).

The table on the following page presents data collection methods that are commonly used to conduct satisfaction surveys in Alberta's learning system, along with considerations for applying each technique.

Another consideration for deciding upon a data collection method is the survey sampling method and sample size. The next section of this manual examines this component of survey design.

Considerations for Applying Survey Techniques

Survey Technique	Process	Advantages	Disadvantages	Costs / Response Rates
Mail Survey (Self-Administered)	A questionnaire is sent to respondents to complete and return through mail.	• Complete at leisure • Detailed response • Interviewer bias removed • Can use visual stimuli • Potential for lengthy questionnaires • Respondent perception of anonymity is moderate	• Lack of control over verbatim responses • Challenges with sequencing • Slow turn-around • In some cases, difficult to encourage response (e.g. parents)	• Low to moderate • Students - moderate to high • Parents - low to moderate • Teachers - moderate to high
Web-based Surveys (Self-Administered)	A surveying method in which the Internet (or an intranet) is used to collect data. Questionnaires are distributed to respondents using electronic mail, or respondents are asked to visit a website to complete an on-screen questionnaire.	• Complete at leisure • Detailed response • Interviewer bias removed • Can use visual stimuli • Quick turn-around • Inexpensive to add sample • Verbatim responses tend to be more detailed • Ability for complex skips and rotations	• Potential challenges with representative samples (respondents must have access to Internet) • Lack of control over verbatim responses • Challenges with sequencing • Lower tolerance for questionnaire length • Need for de-bugging • Potential for crashes • In some cases, difficult to encourage response (e.g. parents) • Respondent perception of anonymity may be low	• Low • Students - moderate to high • Parents - low • Teachers - moderate to high
Telephone Survey (Interviewer Administered)	These surveys involve one-on-one questioning and answering between an interviewer and respondent by means of a telephone.	• Control over sequencing • Relatively fast-turn around • Able to control samples and quotas • Can access widely dispersed samples • Use of computer aided telephone interviewing (CATI) reduces costs with automatic data entry • Typically, interviewers can encourage participation • Respondent perception of anonymity is moderate	• Potential for interviewer influence • There are limits to what respondents can recall under pressure • May be less convenient for respondents • Does not permit visual stimuli • Need for CATI debugging	• Moderate • Typically high rates of return
In Person Survey (Interviewer Administered)	A face-to-face meeting between an interviewer and respondent, which may be conducted in an office, home, school, etc.	• Control over sequencing • Relatively fast-turn around • Potentially able to conduct longer interviews • Potential for lengthy questionnaires • Typically, interviewers can encourage participation • Respondent perception of anonymity is moderate	• Pressure on respondent can influence ability to recall • May be less convenient for respondents • Reduces ability to supervise • Greatest potential for interviewer influence • Can be affected by weather	• High • Typically high rates of return

Might be used to survey:
- Parents
- Employers
- Citizens

- *Telephone survey* - (an interviewer administered survey) trained interviewers contact respondents by telephone and administer the interview. Interviewers ask respondents questions and record responses on paper or computer-aided telephone interview forms. The telephone survey has been used to conduct satisfaction surveys with parents, local employers and the public. Typically, this survey technique has not been employed with students or teachers because these groups are mostly captive audiences within the learning system and can be efficiently interviewed through the mail or web-based survey techniques (as presented above).

Might be used to survey:
- Parents
- Employers
- Younger students

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Survey Technique	Process	Advantages	Disadvantages	Costs Response Rates
Mail Survey (Self-Administered)	A questionnaire is sent to respondents to complete and return through mail.	• Complete at leisure • Detailed response • Interviewer bias removed • Can use visual stimuli • Potential for lengthy questionnaires • Respondent perception of anonymity is moderate	• Lack of control over verbatim responses • Challenges with sequencing • Slow turn-around • In some cases, difficult to encourage response (e.g. parents)	• Low to moderate • Students - moderate to high • Parents - low to moderate • Teachers - moderate to high
Web-based Surveys (Self-Administered)	A surveying method in which the Internet (or an intranet) is used to collect data. Questionnaires are distributed to respondents using electronic mail, or respondents are asked to visit a website to complete an on-screen questionnaire.	• Complete at leisure • Detailed response • Interviewer bias removed • Can use visual stimuli • Quick turn-around • Inexpensive to add sample • Verbatim responses tend to be more detailed • Ability for complex skips and rotations	• Potential challenges with representative samples (respondents must have access to Internet) • Lack of control over verbatim responses • Challenges with sequencing • Lower tolerance for questionnaire length • Need for de-bugging • Potential for crashes • In some cases, difficult to encourage response (e.g. parents) • Respondent perception of anonymity may be low	• Low • Students - moderate to high • Parents - low • Teachers - moderate to high
Telephone Survey (Interviewer Administered)	These surveys involve one-on-one questioning and answering between an interviewer and respondent by means of a telephone.	• Control over sequencing • Relatively fast-turn around • Able to control samples and quotas • Can access widely dispersed samples • Use of computer aided telephone interviewing (CATI) reduces costs with automatic data entry • Typically, interviewers can encourage participation • Respondent perception of anonymity is moderate	• Potential for interviewer influence • There are limits to what respondents can recall under pressure • May be less convenient for respondents • Does not permit visual stimuli • Need for CATI debugging	• Moderate • Typically high rates of return
In Person Survey (Interviewer Administered)	A face-to-face meeting between an interviewer and respondent, which may be conducted in an office, home, school, etc.	• Control over sequencing • Relatively fast-turn around • Potentially able to conduct longer interviews • Potential for lengthy questionnaires • Typically, interviewers can encourage participation • Respondent perception of anonymity is moderate	• Pressure on respondent can influence ability to recall • May be less convenient for respondents • Reduces ability to supervise • Greatest potential for interviewer influence • Can be affected by weather	• High • Typically high rates of return

❒ ***Determine sample method and size***

A small survey of ten Alberta School authorities revealed that most adopted census approaches for conducting satisfaction surveys. For example, all students in grades 4, 8 and 12, and their parents, were provided an opportunity to participate in the satisfaction survey. As well, all teachers and administrative staff within the authorities could participate in the survey.

The census approach, however, might be less practical when surveying local employers or the general citizenry.

Satisfaction surveys may be conducted on an entire population (i.e. a census survey), or on a sample of a population. This approach might be used when the survey population is small, or when comprehensive data is required. Another reason for conducting a census is to allow everyone within a population the opportunity to provide feedback. Often though, satisfaction surveys are conducted on a portion of the population (i.e. a sample). This approach reduces costs where the population to be surveyed is large. **To provide reliable data that can be used to make inferences about the population as a whole, it is important that the sample survey be conducted on a portion or sample of the population that is representative of the whole.**

With a census survey approach, all members of the targeted population are offered an opportunity to participate in the satisfaction survey. This does not mean that all members will participate (unless legislated by law). Rather, each member has an opportunity respond to the survey, but it is their choice as to whether they will participate (at least in the context of conducting surveys within Alberta's learning system). In most cases, the data gathered using a census approach will result in a sample of the population (rather than a true census where 100% of the population is surveyed). Where substantially less than 100% of the population responds to a census survey, those responsible for the survey analysis should check for characteristics of the non-respondents that might bias the survey results.

Various sampling methods can be employed for surveys (see following page); however, probability samples should be used whenever possible. With probability sampling, each member within a population (or sub-populations) has a known probability (e.g. an equal opportunity) of being selected to respond to the survey and inferences to the population can usually be drawn about the population from the responses of the sample. Non-probability samples may be biased because of the way respondents are selected to participate in the survey. **If a sample is biased, it can be difficult (if not impossible) to draw inferences about the entire population from the data that are gathered.**

Sample size is also an important factor to consider in the sample design. Essentially, the larger the sample, the more certainty the survey researchers can have that the data gathered in the survey will be representative of the opinions of the population. The smaller the sample, the more likely the data from the sample will differ significantly from the opinions of the population.

The relationship between sample size and accuracy of findings is referred to as sampling error (or margin of error) and is a measure, usually estimated, of the extent to which data from the survey sample will represent the entire population. Media often report survey results and present the sampling error for the survey. For example, 77% of respondents were satisfied, plus or minus 5%. The ±5% represents the estimated sampling error for the survey data. In other words, the actual number of satisfied respondents likely lies within the range of 72% and 82%.

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Sampling Approaches and Methods	
Sampling Approaches	Sampling Methods
Probability Samples - All members of a population have a known chance of being selected into the sample	***Systematic Sampling*** - Starting at a random point within a list of population members, a constant skip interval is used to select every other sample member.
	Simple Random Sampling - A table of random numbers, random digit dialing, or some other random selection procedure is used to ensure that each member of a population has the same chance of being selected into the sample.
	Cluster Sampling - The population is divided into geographic areas, each of which must be very similar to the others. A few areas can be selected to conduct a census or a sample can be drawn from a select group of areas.
	Stratified Sampling - If a population is expected to have a skewed distribution for one or more distinguishing factors, subpopulations or strata can be identified and a simple random sample can be drawn from each stratum. Weighting procedures may be required.
Non-Probability Samples – The chance that members of a population have been selected into the sample is unknown.	***Convenience Sampling*** - A "high-traffic" area is used to select respondents for a sample (e.g. a school of high enrolment, an industrial area of a community, etc.)
	Judgment Sampling - A researcher uses his/her own judgment to identify which respondents will be in the sample.
	Referral Sampling - Respondents are asked for names of others like themselves who might participate in a survey (also known as snowball sampling).
	Quota Sampling - Quotas are identified for sub-populations of a population. Respondents are screened to determine whether they represent the parameters of the quota.

Sampling error is estimated within a confidence interval. A confidence interval indicates the probability (e.g. 95 times in 100) that the true value lies within a specific range.[1] It is common for survey findings to rely on a 95% confidence level, but higher (99%) and lower levels (90%) are acceptable. The level of confidence selected depends on the degree of reliability that is deemed acceptable for the survey findings. Another way of communicating confidence intervals is to say "19 times out of 20," which represents a 95% confidence level.

Another point to consider when determining sample size is the types of analyses that will be undertaken. For example, if the researcher wants to compare results among various schools within an authority, consideration should be given to increasing the overall sample size to facilitate greater confidence in findings from the comparative analysis.

[1] Source: How to Conduct Customer Surveys, Institute of Citizen-Centred Service, 2001.

The following table provides sample sizes for various sampling errors at the 95% confidence level. For instance, if a school has 1,000 students, approximately 286 would need to participate in the satisfaction survey for the data to achieve an estimated ±5% sampling error (margin of error) within a 95% confidence level.

Population Size	Sample Size Based on Estimated Response Rate			
25	24	24	22	20
50	48	44	40	33
100	92	80	67	50
200	169	133	101	67
300	236	171	121	75
400	294	200	135	80
500	345	222	145	83
600	390	240	152	86
800	465	267	163	89
1,000	526	286	169	91
2,500	769	345	189	96
5,000	909	370	196	98
10,000	1,000	385	200	99
25,000	1,064	394	202	100
100,000	1,095	398	204	100
500,00 or more	1,110	400	204	100

Adapted from a sample size table presented in *How Big Should the Sample Be?* Statistics Canada, 1993

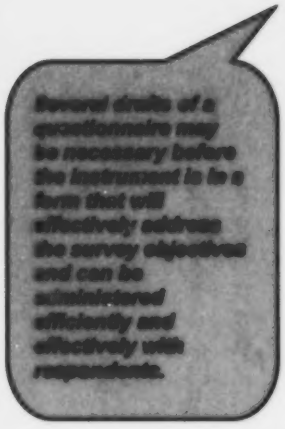
Many school authorities in Alberta have adopted the census approach to survey parents in mail surveys. One of the reasons for implementing this approach is to compensate for high non-response rates (between 60% to 85%) typically experienced in mail surveys of population.

Non-response is another issue to consider when determining sample size. In some cases, non-response may be high (e.g. a mail or web-based survey of parents) or low (a web-based survey in which students complete the questionnaire in a class lab). This factor needs to be considered when determining a sample size for a survey.

Sample Frame - Any list, database, reference material, or device that identifies, and allows access to members of a target population could be used as a sample frame for a satisfaction survey. Examples of a sample frame within Alberta's learning system might be a list of parents (with addresses, telephone numbers or e-mail addresses), a database of students' e-mail addresses, and telephone yellow pages that list companies in a local area.

The sample frame used for a survey should be as comprehensive as possible. Any member information missing from a sampling frame will cause sampling errors. Researchers may need to update or improve the sample frame prior to a survey to minimize the potential for errors in the sampling process.

In some cases (e.g. a telephone survey), a sample frame will need to have significantly higher numbers of contacts in order to obtain the desired sample size. For example, a telephone survey may require a listing of contacts that is 3 or 4 times higher than the targeted sample to achieve the volume of completed responses needed.


Several drafts of a questionnaire may be necessary before the instrument is in a form that will effectively address the survey objectives and can be administered efficiently and effectively with respondents.

❒ ***Design survey tools and instruments (e.g. questionnaire)***

A questionnaire is a tool comprised of a group or sequence of questions that are designed to elicit information about one or more subjects from a respondent. A well-designed questionnaire should collect information from a respondent efficiently and effectively, whether it is interviewer-administered or self-administered (i.e. respondent completed). It should be focused to achieve the survey objectives set out in the survey plan, and present questions that are easily understood and can be accurately answered by respondents.

Typically, the questionnaire is one of several instruments that are used in a survey. Survey instruments involve introduction letters, data collection forms, reminder notices, return-envelopes, computer software programs, etc. These instruments serve numerous functions in conducting surveys, for instance:

- Introduce the survey to the respondents,
- Establish rapport with respondents,
- Encourage survey participation,
- Screen respondents to systematically identify appropriate subjects,
- Gather information, and
- Enable capture or collection of the data.

The composition of these instruments will have a major impact on data quality, respondent relations and interviewer performance (where appropriate). The following descriptions present the composition and organization of the instruments and some key elements of questionnaire development.

Instrument Composition and Organization

- Introduction - The introduction describes the purpose of the survey, establishes a rapport with respondents, encourages participation, and screens respondents for qualifications. Ensure that the value of providing information is made clear to respondents by explaining how the information will be used. Respondents should also be assured that their responses are confidential and that their participation is voluntary. The following elements should be present in the introduction section of questionnaires:

  - ✓ Identification of survey organization/sponsor.
  - ✓ Purpose of the survey.
  - ✓ Explanation of respondent selection.
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Sample Size Table at 95% Confidence Interval (assuming a probability sample)				
Population Size	Sample Size Based on Estimated Sampling Error			
	±3%	±5%	±7%	±10%
25	24	24	22	20
50	48	44	40	33
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200	169	133	101	67
300	236	171	121	75
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- Screening process - A process that systematically selects respondents to interview and excludes those who do not qualify. The process can also randomize the selection of respondents (e.g. "May I speak to the person in your household whose birthday comes next?").

  - ✓ Use screening questions that exclude the largest proportions of unqualified respondents first.
  - ✓ Avoid placing sensitive screening questions first.
  - ✓ Use screening process to fill quotas.
  - ✓ Keep track of call record for estimates or weighting.
  - ✓ Use clear quota/termination instructions.

- Instructions - In some cases, respondents will be presented with instructions to participate in a survey or complete a questionnaire. Instructions may be presented in a separate document to the data collection form (questionnaire), at the beginning of the data collection form or for individual questions presented in the data collection form. These instructions should:

  - ✓ Be as concise as possible.
  - ✓ Avoid emotionally loaded terms.
  - ✓ Be clear, uncluttered, and appealing.
  - ✓ Possibly use symbols or illustrations (e.g. Place a check in the appropriate box ... e.g.☑).

Several schools have used symbols as response categories for younger students (grades 1, 2, & 3) to respond to surveys.

e.g.

- Data collection forms - Data collection forms present questions that address the survey objectives and question responses used to record answers on the form. These forms may be printed on paper, or presented electronically. Another component of data collection forms is the equipment or materials that might be used to capture the data (e.g. return-envelopes, computers, hand-held devices, etc.).

Basic Questionnaire Development

Questionnaires should be designed to address the following:

- Present relevant questions that are required to address the survey objectives. In other words, questions should focus on the topic of the survey.

- Start with easy, unthreatening, but pertinent questions, to build a rapport with the respondent. Demographic questions should only be present at the beginning of a questionnaire when they are being used for screening purposes.

- Definitions should be clearly stated to respondents.

- Be as brief as possible.

- When switching topics within a questionnaire, use a transitional phrase to allow respondents to 'switch' their thoughts.

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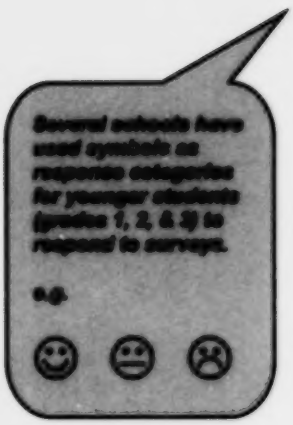

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- Be as brief as possible.

- When switching topics within a questionnaire, use a transitional phrase to allow respondents to 'switch' their thoughts.

- Use filter questions to let respondents avoid sets of questions that do not pertain to them.

- Personal information gathered within questionnaires should comply with specifications presented in the *Freedom of Information and Protection of Privacy Act.*

- Question structure, wording and formatting should minimize any biasing of responses. At the very least, questions should:

  - ✓ Address a single concept only.
  - ✓ Not use double negatives, unfamiliar words, abbreviations, acronyms, trade jargon, colloquialisms, etc.
  - ✓ Avoid humor.
  - ✓ Be time specific.
  - ✓ Be as concise as possible.
  - ✓ Avoid emotionally loaded terms.
  - ✓ Be clear, uncluttered, and appealing.
  - ✓ Not lead respondents to provide a specific response.
  - ✓ Avoid implied alternatives.

Types of Questions

There are three main types of questions posed to respondents in questionnaires:

- ***Open-ended questions*** - enable respondents to answer in their own words. An open question allows respondents to interpret the meaning of the question and provide an answer that addresses their interpretation.

  e.g. What do you like about the school your child attends?

  _____

  _____

  Open-ended questions are presented in questionnaires for several reasons:

  - ✓ To provide respondents an opportunity for self-expression
  - ✓ To allow respondents to elaborate on complex issues
  - ✓ To allow a full range of responses
  - ✓ To allow for clarification
  - ✓ To obtain 'natural' wording
  - ✓ To gather numerical data (e.g. In what year were you born? 19___)
  - ✓ To add variety to the questionnaire

  There are challenges with open-ended questions, for both the respondent and the researcher that is conducting the satisfaction survey. For respondents, open-ended question can be demanding and require more thinking than closed ended-questions. As well, it can be more time consuming for the respondent to answer an open-ended question. In terms of researchers who conduct surveys, it can be time consuming and difficult to record the responses, there is likely a need to code the data into categories, and it can be difficult to analyze and interpret the data.

- ***Closed-ended Questions*** - respondents are offered prescribed answers in which they can choose. Essentially, respondents are restricted to choosing an answer or response option that is specified to them.

  There are generally three types of closed-ended questions commonly used in satisfaction surveys within Alberta's learning system, including:

Two-choice or multiple-choice questions are used to determine whether one alternative will be favored over the rest, or if proportions of the population tend to prefer various alternatives.

- Two-choice question (only two choices are available to the respondent):

  e.g. Are there any children in your household who are attending elementary, junior high or senior high school in Alberta?

  ❒ Yes ❒ No

- Multiple-choice question (more than two-choices):

  e.g. Are you currently enrolled in ...

  ❒ a public school ❒ a separate school ❒ a private school

A checklist question is used when researchers are interested in how often a particular response option is chosen by respondents or the frequency by which one option is chosen over others.

- Checklist question (check as many choices as apply):

  e.g. What subjects have you studied this term (select all that apply) ...

  ❒ English ❒ Math ❒ Science ❒ Social Studies

Closed ended questions are usually easy and fast for respondents to answer and are easy for the researcher who conducts the survey to code and analyze. Closed-ended questions can take effort, on the part of the researcher, to develop and may oversimplify an issue.

- ***Scale-Response Questions*** - Response scale questions are instruments used to measure phenomena (e.g. issues, experiences, perceptions, etc.) that cannot be easily assessed by direct means (e.g. observable incidents of behavior). Respondents are asked to consider their response or answer to a question based on a scale, range or rank.

There are numerous types of scaled response questions. The following provides some examples of scale-response questions that might be used in a satisfaction survey about the learning system:

Scaled questions are used to determine a level of measurement about an issue, topic or subject. Ranking questions are typically used to identify respondents' favorability among different options.

Do you agree or disagree that your school provides a safe environment?

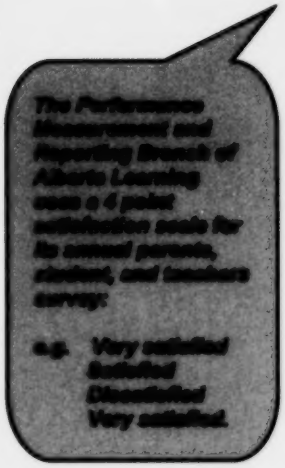
❒ Agree ❒ Disagree

Overall, how satisfied or dissatisfied are you with the quality of education you receive in your school? Are you...

❒ Very satisfied ❒ Satisfied ❒ Dissatisfied ❒ Very Satisfied

Please rank each subject in terms of your preference. Place a '1' by your first choice, a '2' by your second choice, and so on.

___ English ___ Math ___ Science ___ Social Studies


The Performance Measurement and Reporting Branch of Alberta Learning uses a 4 point satisfaction scale for its annual parents, student, and teachers survey:
e.g. Very satisfied
Satisfied
Dissatisfied
Very satisfied.

There is no industry standard for the type of scale questions that might be used in each and every situation. Any number of question items and scale categories may be created depending on the nature of the issues that are being investigated in the survey research.

Overall, when selecting a response scale question, researchers should consider whether the question (and its response scale) is:

- ✓ Easy for respondents to understand.
- ✓ Easy for researchers to interpret.
- ✓ Minimizing response bias.
- ✓ Easy to distinguish between point intervals.
- ✓ Relevant to the business decision.

Additional issues to consider when developing or using response scales questions include:

- Regardless of the number of categories selected in the response scale, researchers should not compare or perform comparative analysis of dissimilar and unrelated scales (because interval relationships among different scales cannot be correlated). For example, the results of a 4-point scale should not be compared to those of a 5-point scale. As well, a scale using 'satisfaction' categories should not be compared with 'agreement' categories.

- Researchers should not report neutral or middle category responses to odd numbered scales as affirmative or negative opinions or perceptions, unless an unbalanced scale has been specifically articulated to respondents (limitations to unbalanced scales are presented later in this section).

Do Not Report Neutral or Middle Category as Affirmative or Negative Opinion or Perception

How satisfied or dissatisfied are you, using a scale of:

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very Dissatisfied

How satisfied or dissatisfied are you, using a scale of:

- 1 being very satisfied, and
- 5 being very Dissatisfied

Middle Category can be Reported As Affirmative

How satisfied or dissatisfied are you, using a scale of:

- Very strongly satisfied
- Strongly satisfied
- Somewhat satisfied
- Somewhat dissatisfied
- Dissatisfied

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There are generally three types of closed-ended questions commonly used in satisfaction surveys within Alberta's learning system, including:

Two-choice or multiple-choice questions are used to determine whether one alternative will be favored over the rest, or if proportions of the population tend to prefer various alternatives.

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❒ Yes ❒ No

- Multiple-choice question (more than two-choices):

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A checklist question is used when researchers are interested in how often a particular response option is chosen by respondents or the frequency by which one option is chosen over others.

- Checklist question (check as many choices as apply):

e.g. What subjects have you studied this term (select all that apply) ...

❒ English ❒ Math ❒ Science ❒ Social Studies

Closed ended questions are usually easy and fast for respondents to answer and are easy for the researcher who conducts the survey to code and analyze. Closed-ended questions can take effort, on the part of the researcher, to develop and may oversimplify an issue.

- ***Scale-Response Questions*** - Response scale questions are instruments used to measure phenomena (e.g. issues, experiences, perceptions, etc.) that cannot be easily assessed by direct means (e.g. observable incidents of behavior). Respondents are asked to consider their response or answer to a question based on a scale, range or rank.

There are numerous types of scaled response questions. The following provides some examples of scale-response questions that might be used in a satisfaction survey about the learning system:

Scaled questions are used to determine a level of measurement about an issue, topic or subject. Ranking questions are typically used to identify respondents' favorability among different options.

Do you agree or disagree that your school provides a safe environment?

❒ Agree ❒ Disagree

Overall, how satisfied or dissatisfied are you with the quality of education you receive in your school? Are you...

❒ Very satisfied ❒ Satisfied ❒ Dissatisfied ❒ Very Satisfied

Please rank each subject in terms of your preference. Place a '1' by your first choice, a '2' by your second choice, and so on.

___ English ___ Math ___ Science ___ Social Studies

The Performance Measurement and Reporting Branch of Alberta Learning uses a 4 point satisfaction scale for its annual parents, student, and teachers survey:

e.g. Very satisfied
Satisfied
Dissatisfied
Very satisfied.

There is no industry standard for the type of scale questions that might be used in each and every situation. Any number of question items and scale categories may be created depending on the nature of the issues that are being investigated in the survey research.

Overall, when selecting a response scale question, researchers should consider whether the question (and its response scale) is:

- ✓ Easy for respondents to understand.
- ✓ Easy for researchers to interpret.
- ✓ Minimizing response bias.
- ✓ Easy to distinguish between point intervals.
- ✓ Relevant to the business decision.

Additional issues to consider when developing or using response scales questions include:

- Regardless of the number of categories selected in the response scale, researchers should not compare or perform comparative analysis of dissimilar and unrelated scales (because interval relationships among different scales cannot be correlated). For example, the results of a 4-point scale should not be compared to those of a 5-point scale. As well, a scale using 'satisfaction' categories should not be compared with 'agreement' categories.

- Researchers should not report neutral or middle category responses to odd numbered scales as affirmative or negative opinions or perceptions, unless an unbalanced scale has been specifically articulated to respondents (limitations to unbalanced scales are presented later in this section).

Do Not Report Neutral or Middle Category as Affirmative or Negative Opinion or Perception

How satisfied or dissatisfied are you, using a scale of:

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very Dissatisfied

How satisfied or dissatisfied are you, using a scale of:

- 1 being very satisfied, and
- 5 being very Dissatisfied

Middle Category can be Reported As Affirmative

How satisfied or dissatisfied are you, using a scale of:

- Very strongly satisfied
- Strongly satisfied
- Somewhat satisfied
- Somewhat dissatisfied
- Dissatisfied

- Researchers should enquire with other researchers and Alberta Learning as to response scale questions being used in similar satisfaction surveys to enable comparative analysis across studies. Typically, Alberta Learning researchers have used balanced (see below) or equally weighted affirmative or negative 4 or 5 point scales in survey research.

Balanced 4-Point Scale	*Balanced 5-Point Scale*
• Very satisfied	• Very satisfied
• Satisfied	• Satisfied
• Dissatisfied	• Neither satisfied nor dissatisfied
• Very dissatisfied	• Dissatisfied
	• Very Dissatisfied

The following examples depict scales commonly used in satisfaction surveys:

- ***Satisfaction scale*** - How satisfied or dissatisfied are you with ...? Please use a scale of 'very satisfied', 'satisfied', 'dissatisfied', and 'very dissatisfied.' (add 'neither satisfied nor dissatisfied' added as a mid-point for a 5 point scale).

- ***Performance scale*** - How would you rate ...? Would that be 'very good', 'good', 'fair' and 'poor' (add 'excellent' as a starting point for a 5 point scale)?

- ***Expectation scale*** - Compared to what you expected, how would you rate ...? Would you say 'much better than expected', 'better than expected', 'about as expected', 'worse than expected' and 'much worse than expected'.

- ***Priority scale*** - How important is ... to you? Please use a scale of 'not at all important', not important', 'important' and 'very important'.

- ***Improvement scale*** - Indicate the amount of improvement, if any, that is needed? Would you say 'none', 'slight', 'some', 'much' or 'huge'.

Alberta Learning conducts annual satisfaction surveys with students, parents and teachers in the province. Schools and school boards involved in survey research can review the questionnaires used in these surveys by accessing the following web pages:

www.learning.ab.ca/educationsystem/satisfaction/default.asp

Also, Appendix B presents a four step process for researchers to use when developing scale response questions.

❒ *Pre-test survey tools and instruments*

It can be helpful to have individuals not directly involved in the survey project review the questionnaire. They may find issues (comprehension, logic of structure, clarity of instruction, etc.) that are not readily apparent to the researcher managing the satisfaction survey project.

Survey tools and instruments (including questionnaires) should be tested, under field conditions, prior to implementation. Essentially, pre-testing is an informal test of the tools and instruments usually administered in the same manner as planned for the survey. The entire questionnaire can be tested, or a portion of the questionnaire may be tested (mainly in cases where most of the questions have been asked in previous surveys).

Pre-tests are undertaken to:

- ✓ Discover vague question wording, or poor ordering.
- ✓ Identify errors in questionnaire layout, instruction, or sequencing.
- ✓ Identify questions that respondents are unable or unwilling to answer.
- ✓ Develop response categories.
- ✓ Detect bias in questions.
- ✓ Determine suitability of the questionnaire for measuring concepts.
- ✓ Measure interview length and refusal patterns.

The size of the pre-test sample should depend on the specifications of the project (e.g. population or survey sample size, questionnaire previously used in past surveys, etc.). The average pre-test consists of approximately 10-15 completed interviews.

Pilot testing may also be necessary, especially for large and complex surveys. Pilot testing is essentially a "dress rehearsal" and duplicates the final survey design on a small scale from beginning to end, including data processing and analysis. Pilot testing provides an opportunity to refine the questionnaire, as well as the overall survey administration process.

It may be necessary to test the survey instruments more than once.

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Administering the Survey

❒ *Prepare instruments, staff and equipment for survey administration*

Normally, there are a variety of tasks to undertake to prepare for the data collection process. Tasks may differ depending on the data collection technique chosen for the survey.

- Mail surveys

  - ✓ Closed ended questions may need to be pre-coded to facilitate data entry.
  - ✓ If scanning equipment is being used for coding, questionnaires may need to be formatted to accommodate scanning technology.
  - ✓ Survey instruments will need to be printed (introduction letters, questionnaires, instruction sheets, self-addressed stamped envelopes, etc.)
  - ✓ Questionnaires may need to be pre-coded with identification numbers or printed on various colored paper to identify respondents or sub-sets of respondents.
  - ✓ Sampling protocols should be implemented to ensure randomized samples.
  - ✓ Contact labels (for envelopes) may need to be developed from the sample frame and put on envelopes.
  - ✓ Envelopes will need appropriate postage.
  - ✓ Survey instruments may need to be put into envelopes for distribution.
  - ✓ An alternative to the above tasks, a mail distribution house might be contracted to organize and disseminate survey instruments to respondents.

Some school authorities have partnered or shared resources with other authorities to conduct surveys.

e.g. sharing questionnaire scanning equipment

- Telephone surveys

  - ✓ Questionnaires may be pre-coded and printed (if data recording is paper-based). Alternatively, questionnaires may be programmed for use in a computer-aided telephone interviewing system (a computer software program that enables simultaneous interviewing and data entry).
  - ✓ Call record sheets may be printed using data from the sample frame (see an example in Appendix C). Another option is to use a call management software program (which may be part of the computer-aided telephone interviewing system). In either case, sampling protocols should be implemented to ensure representative samples (if probability samples are being used).
  - ✓ Train telephone interviewers for survey administration. A basic training program might include:
    - Instruction on interviewing protocols (techniques, building relationships, recording data, ethics, etc.)
      - ✓ Interviewers need to establish a friendly relationship with respondents, gain cooperation and trust.
      - ✓ Introduction and screening is very important in building the relationship between interviewer and respondent.
      - ✓ Interviewers should approach each interview as though it were to take place immediately.
      - ✓ Answer respondents' questions.
      - ✓ Interviewers should always be pleasant and professional in interviewing situation.
      - ✓ Vocal expressions should possess clear enunciation, moderate rate of speech, low pitch and inflection.
      - ✓ Interviewers should:
        - Ask every question exactly as worded and structured in the questionnaire.
        - Ask questions in a positive manner.
        - Repeat and clarify questions that are misunderstood or misinterpreted.
        - Probe for clarification of responses
        - Listen to full answers provided by respondents.
      - ✓ Interviewers should not:
        - Suggest answers to a respondent
        - Ask leading questions when probing or clarifying responses.
        - Provide personal information.
        - Offer personal opinions about survey issues.
    - Brief interviewers on the background of the project.
    - Brief interviewers on survey instruments and record call sheets
      - ✓ Go through each question with interviewers. Ensure they understand each question, instructions for question, skip patterns.
      - ✓ Explain proper data recording procedures.
      - ✓ Go through record call sheets to ensure interviewers and familiar with the process.
    - Have interviewers practice interviewing (such as interviewing each other) with the survey instruments.

An interviewer training program may take 3 to 5 hours to adequately instruct interviewers on the tasks and responsibilities.

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An interviewer training program may take 3 to 6 hours to adequately instruct interviewers on the tasks and responsibilities..

- Web-based surveys

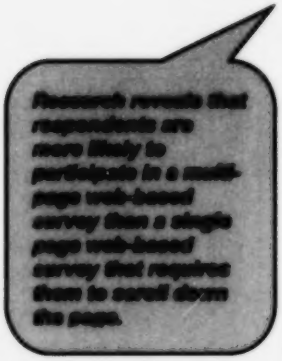
Research reveals that respondents are more likely to participate in a multi-page web-based survey than a single page web-based survey that requires them to scroll down the page.

- ✓ Closed ended questions may need to be pre-coded to facilitate software programming.
- ✓ Questionnaires will need to be programmed into a survey computer software program. The software program may be web-page or e-mail based, or an electronic file attached to an e-mail message. (Note: this step in the process may require specialized computer software or expertise).
- ✓ Sampling protocols should be implemented to ensure randomized samples.
- ✓ Invitations will need to be sent to sample that is derived from the sample program.

- In-person surveys.

- ✓ Questionnaires may need to be pre-coded and printed (if data recording is paper-based). Alternatively, questionnaires may need to be programmed for use on a hand held device or laptop computer for computer-aided telephone interviewing.
- ✓ Contact record sheets and protocols will need to be organized to guide interviewers in the selection of respondents.
- ✓ Train interviewers for survey administration. The basic training program is presented above (telephone survey).

- Web-based surveys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❒ *Collect data from respondents*

Survey instruments (or invitations to participate) should be sent to respondents in self-administered surveys. In interviewer assisted surveys, interviewers should begin the interview process (within a day or two of their training session).

During data collection, the following points must be considered:

- Respondents should always be given a contact, if they request, in case they have questions or concerns they wish to express. Respondents should be able to check, without difficulty, the identity and validity of the organizations or individuals contacting them for the survey project.
- Respondents should always be informed that the survey is voluntary and that they do not need to give a reason for declining participation. They should not be misled when being asked for their cooperation.
- Respondents should be given an accurate estimate of interview length.
- The survey needs to clearly state how the results will be used and reported.
- The respondents must be told how the issue of confidentiality will be handled and whether or not their answers can be identified in the results.
    - ✓ In self-administered surveys, respondents should be provided with information that will enable them to complete the questionnaire.
    - ✓ In interviewer-administered surveys, interviewers should have training to properly administer questionnaires to respondents through telephone interviews.
    - ✓ Supervisors should monitor flow rates (completion rates per hour) to control costs and ensure interviewers are maintaining efficient completion rates.
- Quality control measures should be established and employed, such as:
    - Appropriate sample control procedures should be organized and implemented for all data collection operations. These procedures may track the completion status of surveys, monitor quotas, establish flow rates, etc.
    - Effective control systems should be established to ensure the security of data transition and handling.
    - Interviews should be monitored or confirmed (i.e. least 10% of completed interviews should be confirmed for telephone and in-person surveys).
    - 100% data entry verification should be conducted for collection methods that do not employ computer-aided data entry (e.g. computer-aided telephone interviewing).

❒ *Prepare data for analysis*

Several school authorities contract out the data capture, cleaning and editing and tabulation components of the survey project.

The satisfaction survey data will need to be cleaned and edited in preparation for analysis. The cleaning and editing process involves reviewing questionnaires to increase accuracy and precision. In a review, researchers might identify illegible, incomplete, inconsistent or ambiguous responses. As well, re-coding of data may be necessary to further enhance the use of the data.

A codebook should be established to ensure internal consistencies within the dataset. Codebooks can be very helpful if more than one individual will be involved in the data cleaning and editing. For instance, a codebook can be used to train data entry staff. Codebooks contain instructions and necessary information about the data set. It is common for every question (variable) to have descriptions of what might be contained in responses to the question. For example, a codebook might have the following description for a question

variable name	-	satisfaction with education
question number	-	Question 3
response label	-	1=very satisfied 2=satisfied 3=dissatisfied 4=very dissatisfied 5=don't know
Instructions	-	Recode label 5 as missing for data analysis

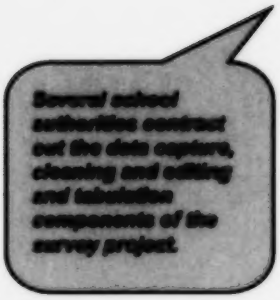
Researchers should run a set of frequencies to revel the number of responses for each question and response category. A review of these frequencies will give the researcher a rough check for completeness and accuracy of the data (e.g. responses should not exceed the total number of respondents, responses should not show be out of range values, etc.).

Data cleaning involves checks of data consistency and missing responses. Consistency checks identify data that are out of range, logically inconsistent or have extreme values. These types of errors are inadmissible in the data set and must be corrected (i.e. re-contacting respondents) or discarded.

Re-coding (variable transformation) involves transforming data to create new variables or modify existing variables. This process is common with open-ended questions where responses are re-coded into consistent categories.

Once a researcher is confident that the data is properly cleaned and edited, the data set is ready for analysis.

❒ *Prepare data for analysis*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❒ *Analyze data*

Data analysis is the process of transforming raw data into useable information. The basic steps of the analytic process consist of examining the issue and asking meaningful questions, and developing support for answers that are communicated to decision makers and other readers. To be an effective support for decision making, the data must be analyzed appropriately. The analysis should:

- Examine the issue and ask meaningful questions
  - ✓ Generally, follow guidelines for analysis accepted in the field of survey research.
  - ✓ Effective data analysis typically focuses on issue, theme, and idea categorization, rather than simply presenting the survey data.
  - ✓ Apply statistical significance tests to address hypotheses, where appropriate.
  - ✓ Caution should be observed in drawing conclusions concerning causality. In the absence of certainty that a specific cause is the only one consistent with facts, cite all possible explanations, not just one.
- Develop support for answers
  - ✓ Use frequencies, cross tabulations and statistical tests to identify proportional representations (percentages) and correlations among data.
  - ✓ Indicate the rationale for the selection of any significance tests used.
  - ✓ Indicate details about any transformations (use of Z-Scores, for example) made on the data.
  - ✓ Outline any conclusions drawn from the analysis or limitations of the analysis.
- Various types of statistical analyses may be applied to the data to reveal issues, trends, associations, etc.
  - ✓ Descriptions of central tendencies reveal typical, average or representative values of the data set - mean (average), median (middle value - half the data are larger, the other half smaller), and mode (most frequently occurring value).
  - ✓ Other descriptive statistics such as frequencies, percentiles and percentages summarize the data by revealing distributions of responses. In satisfaction surveys, it is common to identify the percentage of respondents who express satisfaction (e.g. very satisfied or satisfied).
  - ✓ Cross-tabulations examine the relationships among two or more variables. For example, different schools against satisfaction levels).
  - ✓ Statistical significance tests reveal notable differences within the data set (Chi-square, z scores, t-tests, analysis of variance, etc.)
  - ✓ Multivariate analysis is conducted to determine relationships and associations between and among various variables in the data set (e.g. factor analysis, regression analysis, etc.)

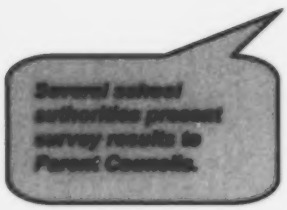
- An analytical tool commonly used in satisfaction research is an importance/satisfaction matrix. This analysis involves plotting ratings from satisfaction and importance scaled-response questions on a grid and helps define priorities for service delivery. The grid enables researchers to visually identify areas for service improvement.

Service Improvement Priority Matrix

A school authority might ask two scaled-response questions with 15 items related to delivery of education services. The first question asks respondents to answer using an importance scale, the second question a satisfaction scale (Note: if an item is asked in terms of importance, it is also asked in the context of satisfaction.

Average scores for importance and satisfaction ratings plot the mid-point on each axis of the matrix. The researcher then plots the data in the matrix. Those items that fall in the Quadrant 1 should be given further consideration. Those that land in Quadrant 3 are considered low priority.

Communicating Survey Results



❒ *Identify stakeholder groups that will receive survey results*

The documentation of survey results serves as a record of what was done during the survey research to provide a context for effective and informed use of the results. Reporting should provide a complete, unambiguous and multi-purpose record of the survey, including the data produced by the survey.

Knowing the intended audience for the report can influence the way a satisfaction survey report is prepared. Some issues that researchers should consider when preparing a report, include:

- ✓ What audiences will be reviewing and using the report (administration, teachers, Alberta Learning, the general public, etc.)?
- ✓ Will readers of the report understand survey concepts and terminology?
- ✓ Will audiences expect to read interpretation of the data in the report?
- ✓ What key themes arise from the data results (a good report typically conveys several key themes from the data)?

❒ *Determine methods to report survey results*

Reporting may employ multiple forms (e.g. paper, electronic, visual, etc.) and address the needs of different audiences and purposes. It is important to consider the reporting expectations of interested individuals or groups when deciding which method is appropriate.

Survey results can be presented in various forms, such as:

- ***Oral reports*** are often used to inform interested individuals or groups of survey results. Typically, oral reports are accompanied by a visual presentation (using an overhead projector or computer and LCD projector) that shows graphical illustrations of the survey findings.

- An ***executive summary*** might identify key points in narrative that come out of a satisfaction survey (a one or two page briefing).

- A ***data report*** presents tables of response counts and proportions for all questions asked in the satisfaction survey. There may be little narrative presented in the report, other than an introduction that provides the survey objectives and methodology.

- A ***descriptive or narrative report*** usually summarizes and explains the survey findings, provides interpretation and describes various analyzes, and identifies key themes arising from the data.

Communicating Survey Results

❒ *Identify stakeholder groups that will receive survey results*

Several school authorities present survey results to Parent Councils.

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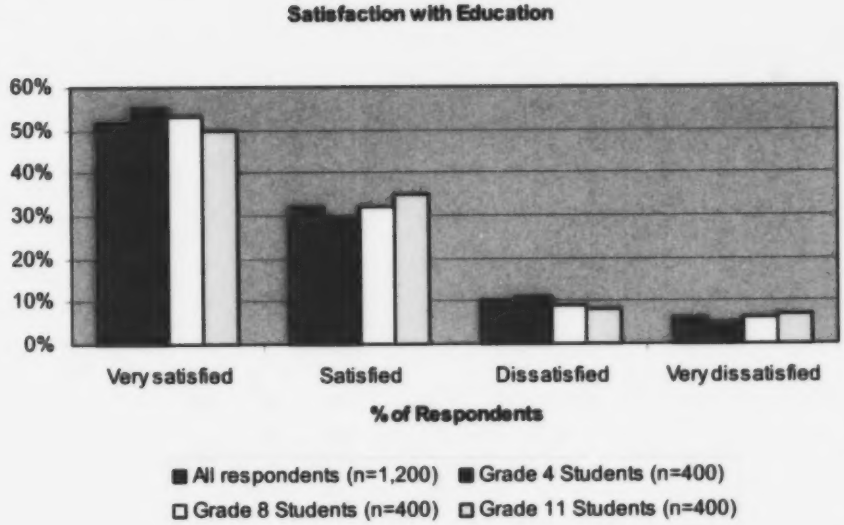
Data from the survey can also be reported in a variety of ways, for example:

- ***Tables***

Satisfaction with Education				
	% of Respondents			
Response Choice	All respondents (n=1,200)	Grade 4 Students (n=400)	Grade 8 Students (n=400)	Grade 11 Students (n=400)
Very satisfied	52	55	53	50
Satisfied	32	29	32	35
Dissatisfied	10	11	9	8
Very Dissatisfied	6	5	6	7
Total	100	100	100	100

(Note: the n= shows the number of respondents in each category)

- ***Charts***



❒ *Prepare survey results report*

To enable a clearer understanding of the results, survey reporting should (particularly in a descriptive or narrative report):

- Identify the survey objectives
- Describe methodologies
  - ✓ A description of the survey population (students, parents, teachers, etc.).
  - ✓ Details of the sampling method, size, and frame.
  - ✓ When technically relevant, a statement of response rates and a discussion of any possible bias due to non-response.
  - ✓ The precision (sampling error) and confidence levels.
  - ✓ The timeframe in which the survey was conducted.
  - ✓ The method(s) by which the data was collected.
- Describe respondents
  - ✓ A demographic profile of respondents should be presented in the report. Comparisons of the sample with the target population might be made to determine whether the sample is representative.
- Present survey results
  - ✓ The relevant factual findings obtained. The level of detail provided in the report will depend on the intended audience, the medium of dissemination, and the intended use of the survey data.
  - ✓ Comparison of actual results to past performance where possible.
  - ✓ Use graphs/figures in addition to text or tables to communicate messages.
  - ✓ In presenting rounded data, use the number of significant digits that is the maximum number consistent with the utility of the data (e.g. 4.6% rather than 4.57869%).
  - ✓ The draft report should be checked and any errors corrected (e.g. consistency of figures used in the text, tables and charts, verification of accuracy of external data, and simple arithmetic).
  - ✓ Conclusions presented in the report should be consistent with the evidence available in the survey data.

- **Other reporting issues**

  - ✓ Provide description of limitations in interpreting the results.
  - ✓ When aggregating and releasing data outside the organization, data cells with counts of less than six should be suppressed. Although, in some circumstances, this number may be as high as ten where the information could be used to identify an individual respondent or small group of respondents. Sensitivity of data cell counts is usually determined by the need to protect individual characteristics of respondents. Methods typically used to transform data to protect personal information include:

    - *Collapsing Categories* - Data are grouped (or re-coded) into cell categories so that none of the cells are considered sensitive.

    - *Cell Suppression* - Sensitive cells are deleted from a table. It should be noted, however, that it may be possible to obtain the value of the suppressed cell by solving a system of linear equations based on other cells in a table.

    - *Rounding* - The data cell value is rounded to a number that would reasonably protect personal information of respondents (e.g. 5 or 10).

    - *Stripping* - The removal of any names and other personal identifiers from records, while leaving other information such as opinion data in the records.

  - ✓ Organize and document references.
  - ✓ Include copies of the survey instruments (and other relevant technical data) in the appendices.
  - ✓ The report should be subject to extensive review by researchers, decision makers, and other relevant staff, as appropriate, to ensure quality and readability. Reports should be edited meticulously.
  - ✓ An communications expert (inhouse or agency) might be consulted to review for sensitivity of issues and plain-language and to determine if a plan or strategy is needed to distribute results to external audiences.
  - ✓ Presentations may be required to School Board Members, Principals, Stakeholders, etc.

Reporting and disclosure of personal information (e.g. names of respondents, individual personal characteristics, etc.) must comply with the privacy protection provisions of the *Freedom of Information and Protection of Privacy Act* and the FOIP Regulation (see Other Issues Related to Satisfaction Surveys).

❒ *Communicate results to interested individuals or groups*

The key messages communicated to interested individuals and groups should reflect the primary findings of the survey and address the information needs of applicable audiences.

Those who have been engaged in survey research are encouraged to share survey results with internal staff, administrators and boards, and external stakeholders and interested parties.

In some cases, data may be sent to Alberta Learning as required in the Accountability Framework of the department.

Implementing Satisfaction Survey Results

❒ *Develop and implement initiatives to address survey results*

The survey findings may provide feedback that requires education providers to develop or enhance initiatives to address new priorities, enhance services, meet expectations, etc. The results may identify what works well and what may need to modified or started.

The survey results may also have direct relevance and influence to business or education plan developed by school authorities and schools.

❒ *Gain additional feedback from stakeholders*

In some cases, the findings of satisfaction surveys may need further examination. Additional research may be needed to clarify information.

Several school authorities use Parent Councils to explore issues drawn out the survey in greater detail.

There are various research techniques that may be undertaken such as focus groups, in-depth interviews, and additional surveys.

Organizations may consider further research opportunities with targeted populations in cases where new issues are identified from the survey data.

❒ *Evaluate the successes and challenges of the survey project*

Researchers who conduct satisfaction surveys are encouraged to assess the effectiveness and value of the research project and provide suggestions for improving the project or, if applicable, recommend the need for additional research or waves of the survey.

- The survey project and its results may be evaluated formally or informally. In other words, sometimes the evaluation will be thorough, structured and formal, while other times it will be impressionistic, subjective and informal. The choice of process will depend on resources and interests of the organization that directs the survey research.
- The basic framework for a project evaluation is to determine what went well, and what did not. Researchers might examine the survey management, methodologies or results to identify strengths and weaknesses.
- Solicit opinions from decision makers, stakeholders and partners in the evaluation. Request feedback on how survey design and administration can be improved.

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❒ *Plan future satisfaction measurement issues*

The evaluation may provide conclusions or assess areas for improvement for future satisfaction survey projects. The following approaches highlight the results that might be provided from the project evaluation:

- ✓ Assess if and how the results were actually used for decision making.
- ✓ Render a judgment on the value of the survey project.
- ✓ Assist decision makers in determining whether to conduct the survey research project again in the future.
- ✓ Identify areas for improvement.

Other Issues Related to Conducing Satisfaction Surveys

Surveying Children and Youth

Special care, attention and precautions should be taken when conducting survey research with children and youth.

School authorities and schools within Alberta's learning system have policies and procedures (formal or informal) related to survey research projects involving their learners. Schools or school boards who are planning to survey children or youth in Alberta's learning system should gain proper authorization within the policies and procedures of their jurisdictions. Organizations who are conducting surveys with students are encouraged to contact policy administrators early in the survey planning process to determine the requirements and specifications needed to proceed with a satisfaction survey.

Alberta Learning has established the following guidelines for conducting survey research with students within the learning system (*Survey Research Policy, Guidelines and Best Practices, 2002)*:

- When a child in elementary school is a respondent, parents or guardians must be informed of the survey research project before conducting an interview (interviewer-administered or self-administered interviews). [2]
- When a youth in a junior or senior high is a respondent, a parent, guardian or relevant adult (such as a teacher) must be informed of the project.
- In any other environment such as the home, school yard or other public places, the child's or youth's parent or guardian must provide consent before the child/youth is approached for an interview.
- Consent by a responsible adult should not be interpreted as constituting permission, as the child/youth must be granted an opportunity to accept or decline his/her participation in the interview. A child/youth must not be approached, under any circumstances, unless the child/youth is

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[2] Section 33 (2) of the *Freedom of Information and Protection of Privacy Act* imposes a duty on public bodies (government departments, agencies, boards, commissions, etc.) to ensure that individuals are properly informed about the purposes for which their personal information will be used. In 1999, Alberta's Information and Privacy Commissioner proposed that elementary school children may not fully comprehend the purposes for which their personal information will be used or raise critical questions about providing personal situations. As such, the Commissioner recommended that "in situations involving the collection of personal information from elementary school children, it is recommended the Public Body inform parents/guardians, in writing of the following:

- The purpose(s) for which the information will be used.
- The legal authority for the collection.
- The title address and phone number of a person who can answer questions.
- How the child's information will be used.
- The organizations involved in the study.
- The measures in place to ensure protection of personal information, and
- That participation in the survey is voluntary."

Clark, Robert C., Information and Privacy Commissioner. Investigation Report 99-IR-002. Alberta: 1999.

accompanied by his/her parent, guardian or a relevant adult (such as a teacher).

- When requesting permission to interview a child/youth, sufficient information must be given to the parent, guardian or a relevant adult (such as a teacher) for him/her to give adequate consideration to the decision about granting permission for the interview. The types of information to provide parents, guardians or a relevant adult are covered in Section 33(2) of the *Freedom of Information and Protection of Privacy Act.* [10]

- It is desirable to have the parent, guardian or a relevant adult (such as a teacher) close at hand while the interview is being conducted.

- While it may be imperative to avoid certain subjects when interviewing children (e.g. a topic that might frighten a child), a similar research subject may be covered with youth if appropriate precautions are taken. Research topics that may need special care or precautions include:

  - Issues that could upset or worry the child/youth.
  - Those that risk creating tension between the child/youth and his/her parents.
  - Those relating to potentially sensitive family situations (e.g. parental relationships, income, use of stimulants, and family illnesses).
  - Those relating to race, religion, or similar socially or politically sensitive matters.
  - Those concerned with sexual activities.
  - Those related to illegal or socially unacceptable activities.

- The overall welfare and well-being of the child/youth participating in survey projects should be given utmost consideration. In all cases, the safety, rights and interests of the child or youth must be advocated and upheld. All survey research carried out with children or youth must be conducted to high ethical standards so that no abuse, real or perceived, is caused to the child or youth involved.

Freedom of Information and Protection of Privacy Specifications

Satisfaction surveys involve the collection, use, retention, disclosure and disposition of personal information. Part 2 of the *Freedom of Information and Protection of Privacy Act (FOIP Act)* and the FOIP Regulation have established privacy protection provisions for how organizations can gather, use or disclose personal information.

Researchers should refer to the following documents in the planning phase of the satisfaction survey project to ensure that the survey adheres to FOIP protocols:

FOIP: Conducting Surveys: A Guide to Privacy Protection, August 2003.

FOIP: Contract Manager's Guide, December 2003.

The Information Management, Access and Privacy Branch of Alberta Government Services has prepared a 'Best Practices Checklist' to assist government staff in addressing privacy compliance challenges as it relates to survey research. This Checklist is presented in Appendix I for consideration. Jurisdictions who are engaged in survey research are encouraged to review the criteria presented in the 'Checklist' to ensure the survey projects comply with the *FOIP Act*. Staff are also encouraged to consult with the Department's FOIP Coordinator to seek advice on privacy and compliance issues.

Definition of Terms

The following are definitions of terms commonly used in survey research, and presented in this document:

- ***Anonymity*** - Information about respondents must be reported in ways that do not permit the identification of any individual.
- ***Bias*** - The tendency, during any step in a survey, to systematically favor or give advantage to answers or findings which will cause resulting estimates to deviate in one direction from the true value. Bias may or may not be intentional.
- ***Census*** - A survey in which the researcher attempts to gather data from all members of a population.
- ***Coding*** - A process of converting questionnaire information to numbers or symbols to facilitate subsequent data processing and analysis.
- ***Codebook*** - A set of question responses and their associated values (code numbers). Typically, codebooks are used to document categories or values assigned to question responses on a survey questionnaire.
- ***Computer-assisted telephone interviewing (CATI)*** - A type of telephone interviewing in which interviewers enter responses to questions into a computer as they are received. A computer viewing screen automatically displays questions that interviewers ask of respondents through a telephone.
- ***Confidentiality*** - The situation where the privacy of information provided by individual respondents to a survey is maintained and the information about individual respondents cannot be derived from the published survey results.
- ***Consent*** - Respondents (or appropriate parents/guardians) providing permission or approval to be interviewed. Respondents have the right to terminate interviews at any time and to withhold any information they choose.
- ***Data*** - Collective reference to individual items of information.
- ***Data Cleaning*** - The application of procedures of coding and identifying missing, invalid or inconsistent entries.
- ***Interview*** - Any form of direct or indirect contact with respondents where the object is to acquire data or information which could be used in whole or in part for the purposes of a survey research project.
- ***Open Competition*** - Service requirements are advertised to the general public and all interested parties are invited to submit a proposal (e.g. through the MERX system or through an advertisement in provincial newspapers).

- ***Personal Information*** - Relates to data or information about an identifiable individual. It includes an individual's name, address, telephone number, age, gender, marital status, educational and employment history, and personal opinions and views.[3] A complete definition is available in the *FOIP Act*, section 1 (n).

- ***Pilot Test*** - A small scale survey, using respondents from the target population for the purpose of testing the integrated functioning of all component parts of the survey operation. Revisions can then be made as necessary before the full-scale survey is undertaken.

- ***Precision*** - A measure of the closeness of the sample estimates to the result from a census taken under identical conditions.

- ***Pre-Test*** - A preliminary testing of individual component parts of a survey to check that each component functions as planned. Each component can then be revised as needed.

- ***Probability Sample*** - Any method of selection of units from a population in which:

    - every unit has a known and calculable chance (greater than zero) of being selected,
    - the sample is drawn by a random selection procedure, and
    - the probabilities of selection are used to project the results from the sample to the population.

- ***Questionnaire*** - A series of structured questions designed to elicit information on one or more topics from a respondent.

- ***Rating scale*** - A type of survey question designed to record direction and strength of a respondent's perception toward a specific topic.

- ***Reliability*** - The extent to which a survey, if repeated using another (but statistically equivalent) sample and identical questionnaire and procedures, would produce the same results.

- ***Representative sample surveys*** - Surveys in which the sample is a selection from a larger population having the essential characteristics of the total population.

- ***Request for Proposals (RFP)*** – A document specifying the requirements of the survey project that is sent out to contractors. The contractors then reply (if interested) with proposals based on these requirements.

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[3] *Freedom of Information and Protection of Privacy, Conducting Surveys: A Guide to Privacy and Protection*, ISBN 0-7785-1799-3, Government of Alberta, September 2001.

- ***Respondent*** - Any individual or organization from whom any information is sought for the purposes of a survey research project. The term covers cases where information is to be obtained by verbal interviewing techniques, postal and other self-completion questionnaires, mechanical or electronic equipment, observation and any other method where the identity of the provider of information may be recorded or otherwise traceable.

- ***Rotations*** - The manner in which various questions or items within a question are asked or shown in different order for each interview. This process helps to eliminate order bias that might develop if questions were asked or shown in exactly the same order for each interview conducted in a particular survey.

- ***Sample frame*** - Any list, material, or device that identifies, and allows access to members of a target population.

- ***Screening*** - The process of checking whether an individual or a situation should be included in a survey or survey question.

- ***Selected Competition*** - A process where specified contractors are invited to respond to a Request for Proposal.

- ***Single Source Selection*** - A process where one contractor is invited to propose on the provision of services.

- ***Skips*** - A device used in questionnaires to guide respondents (or interviewers) past a (set of) question(s) that do not apply to a particular respondent.

- ***Survey*** - The term is used to refer to the general method of data gathering, wherein a number of respondents are asked identical questions through a systematic questionnaire or interview. Instruments used to collect actual data will be referred to as 'questionnaire (s)' or 'survey instrument (s).'

- ***Survey Instrument*** - Any device used to solicit or gather data or information from a respondent, for example, introduction letters, questionnaires, computers, tape recorders, or video tape machines.

- ***Target Population*** - The complete group of units to which survey results are to apply. These units may be persons, animals, objects, businesses, trips, etc.

- ***Validity*** - The degree to which a method of measurement succeeds in measuring what it is intended to measure.

- ***Wave*** - A set of activities in a survey or series of surveys conducted among the same population using the same methodology.

References

This document was developed with input from the following resources. Researchers may find them useful for addressing specific issues.

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Alberta Learning. Consultation Best Practices and Resources. 2001.

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APPENDIX A - Templates for Evaluation of Survey Consultants

Project Name: _____ **Date of Review:** _____

This form provides a framework for evaluating proposals submitted by outside contractors for survey research.

The evaluation process involves assigning rating scores (1 being 'does not meet requirements' and 5 being 'exceeds requirements') to various criteria depending on how well contractors proposals meet the requirements of each criterion. In some cases, there may be some qualifying criteria required for a proposal to be considered. A score of 1 (does not meet requirements) or 2 (somewhat below requirements) would cause the immediate disqualification of a proposal. In order to expedite what can be a lengthy process, these criteria may be evaluated in isolation. Note that the form begins with space for these criteria.

Each criterion can be weighted to reflect the relative importance of the requirements to the survey research project (e.g. one criterion may be more important to the project than another). Assign a weight to each criterion (below). The sum of all the weights should equal 20. Then record the weight for each category in the space provided in the table, and assign a score for each criterion. You may want to include specific comments (strengths and weaknesses) regarding the scores given.

After scoring each category, multiply the scores by the assigned weights. Add the weighted scores and record the total in the box for the Overall Weighted Score.

When scoring, use the following scale:
1 – Does not meet requirements
2 – Somewhat below requirements
3 – Adequately meets requirements
4 – Meets requirements very well
5 – Exceeds requirements

Assign weights to categories:	**Weights:**
Understanding of Project & Requirements	____
Approach/Methodology	____
Project Timelines & Cost	____
Experience & Stature	____
Ability to Complete the Project	____
Overall Assessment	____

Mandatory Criteria	**Comments**		**Evaluation**
	Strengths	**Weaknesses**	**Score** (1 or 2 would be disqualifying)
1. Mandatory Criteria			

Criteria	**Comments**		**Evaluation**		
	Strengths	**Weaknesses**	*Score* x	*Weight* =	**Weighted Score**
2. Understanding of Project & Requirements					
3. Approach/ Methodology					
4. Project Timelines & Costs					
5. Experience & Stature					
6. Ability to Complete the Project					
7. Overall Assessment					
8. Additional Criterion					
				Overall Weighted Score:	

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Assign weights to categories:	**Weights:**
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Approach/Methodology	____
Project Timelines & Cost	____
Experience & Stature	____
Ability to Complete the Project	____
Overall Assessment	____

Mandatory Criteria	**Comments**		*Evaluation*		
	Strengths	**Weaknesses**	**Score** (1 or 2 causes immediate disqualification)		
1. Mandatory Criteria					
Criteria	**Comments**		*Evaluation*		
	Strengths	**Weaknesses**	*Score* x	*Weight* =	**Weighted Score**
2. Understanding of Project & Requirements					
3. Approach/ Methodology					
4. Project Timelines & Costs					
5. Experience & Stature					
6. Ability to Complete the Project					
7. Overall Assessment					
8. Additional Criterion					
				Overall Weighted Score:	

The following summaries present information that can be used to evaluate survey research proposals submitted by outside contractors:

1. Understanding of Project & Requirements

- General understanding
  - Is the methodology appropriate for the project requirements?
  - Does the proposal demonstrate understanding of the essential aspects of the project?
  - Will the end report address the objectives of the project based on the proposal?

- Detailed understanding
  - Does the proposal demonstrate understanding of the issues involved?
  - Can the firm anticipate potential problems?
  - What solutions does the firm propose?

2. Approach/Methodology

- Methodological reliability
  - Does the proposal provide a high probability of accomplishing the study objectives?

- Quality of data
  - Is the accuracy of the data ensured?

- Statistical precision
  - Is the reliability of the data ensured?

- Technical integrity
  - Is the Approach/Methodology based on sound research design principles?

- Flexibility of design
  - Is there enough flexibility to ensure success if project parameters change?

3. Project Timelines & Costs

- Budget
  - How does the cost compare to the budget? Is it reasonable?
  - Have the components of the budget been explained clearly?

- Timelines
  - Are the proposed timelines agreeable with the project requirements?
  - Have the components of the timeline been explained clearly?

4. Experience & Stature

- Education/Technical expertise
  - How much overall experience does the personnel/firm have in data collection and data analysis/report writing?
  - Does the firm possess sufficient background knowledge for the project?

- Experience
  - Does the firm have experience in similar and/or related projects?

- Credibility
  - Strong references from previous clients?

5. Ability to Complete the Project

- Resources
  - Does the firm have/have access to sufficient resources to complete the project?
  - Who are the key personnel to be involved in the project, and how qualified are they? (Need to ensure that qualified personnel identified in the proposal will actually be the ones who carry out the survey project)
  - How involved are key personnel in each phase?

- Management/Supervisory resources
  - Does the firm demonstrate an ability to manage the various aspects of the project, and have they allocated sufficient/appropriate resources for project management and supervision?

6. Overall Assessment

- Overall quality
  - Was adequate care, attention to detail and effort put into planning/creation of the proposal?

- Style
  - Clear/concise writing; carefully edited; well presented concepts; attractive and easily understood layout?

- Involvement
  - Have provisions been identified to keep the clients involved? How/how much?

- Strategy
  - Does the proposal provide a superior strategy for accomplishing goals of the project?
  - Does the firm add extra value to the project?

7. Additional Criterion

- Issues or specifications customized to the project.

8. Additional Criterion

- Issues or specifications customized to the project.

9. Additional Criterion

- Issues or specifications customized to the project.

Project Name: Satisfaction Survey
Name of Company/Firm: ABC Research and Consulting
Name of Reviewer: Jane Smith **Date of Review:** February 1, 2004

This form provides a framework for evaluating proposals submitted by outside contractors for survey research.

The evaluation process involves assigning rating scores (1 being 'does not meet requirements' and 5 being 'exceeds requirements') to various criteria depending on how well contractors proposals meet the requirements of each criterion. In some cases, there may be some qualifying criteria required for a proposal to be considered. A score of 1 (does not meet requirements) or 2 (somewhat below requirements) would cause the immediate disqualification of a proposal. In order to expedite what can be a lengthy process, these criteria may be evaluated in isolation. Note that the form begins with space for these criteria.

Each criterion can be weighted to reflect the relative importance of the requirements to the survey research project (e.g. one criterion may be more important to the project than another). Assign a weight to each criterion (below). The sum of all the weights should equal 20. Then record the weight for each category in the space provided in the table, and assign a score for each criterion. You may want to include specific comments (strengths and weaknesses) regarding the scores given.

After scoring each category, multiply the scores by the assigned weights. Add the weighted scores and record the total in the box for the Overall Weighted Score.

When scoring,use the following scale:

1 – Does not meet requirements
2 – Somewhat below requirements
3 – Adequately meets requirements
4 – Meets requirements very well
5 – Exceeds requirements

Assign weights to categories:	**Weights:**
Understanding of Project & Requirements	5
Approach/Methodology	3
Project Timelines & Cost	4
Experience & Stature	2
Ability to Complete the Project	4
Overall Assessment	2

Mandatory Criteria	**Comments**		*Evaluation*
	Strengths	**Weaknesses**	**Score (1 or 2 causes immediate disqualification)**
Bid is within Budget	Budget = $12,000 Bid = $11,275		5

Criteria	**Comments**		*Evaluation*		
	Strengths	**Weaknesses**	*Score x*	*Weight =*	**Weighted Score**
Understanding of Project & Requirements	Telephone survey proposed, matches objective of validity	Limited depth of interviewing in telephone survey	3	5	15
Approach Methodology	Quality control measures documented	Non-standard quality control measures	4	3	12
Project Timelines & Costs	Well within budget boundary	Timelines are not detailed, may be some risk of late delivery of results	3	4	12
Experience & Stature	Firm is well-known in this market	Firm has not completed comparable project	3	2	8
Ability to Complete the Project	Firm has large professional team	Firm has larger client that may distract resources during our project	2	4	8
Overall Assessment	Firm principals present well, understand project	Some concerns about importance of other clients	3	2	6
Additional Criterion	None				
				Overall Weighted Score:	61

Project Name: Satisfaction Survey
Name of Company/Firm: ABC Research and Consulting
Name of Reviewer: Jane Smith **Date of Review:** February 1, 2004

This form provides a framework for evaluating proposals submitted by outside contractors for survey research.

The evaluation process involves assigning rating scores (1 being 'does not meet requirements' and 5 being 'exceeds requirements') to various criteria depending on how well contractors proposals meet the requirements of each criterion. In some cases, there may be some qualifying criteria required for a proposal to be considered. A score of 1 (does not meet requirements) or 2 (somewhat below requirements) would cause the immediate disqualification of a proposal. In order to expedite what can be a lengthy process, these criteria may be evaluated in isolation. Note that the form begins with space for these criteria.

Each criterion can be weighted to reflect the relative importance of the requirements to the survey research project (e.g. one criterion may be more important to the project than another). Assign a weight to each criterion (below). The sum of all the weights should equal 20. Then record the weight for each category in the space provided in the table, and assign a score for each criterion. You may want to include specific comments (strengths and weaknesses) regarding the scores given.

After scoring each category, multiply the scores by the assigned weights. Add the weighted scores and record the total in the box for the Overall Weighted Score.

When scoring, use the following scale:

1 – Does not meet requirements
2 – Somewhat below requirements
3 – Adequately meets requirements
4 – Meets requirements very well
5 – Exceeds requirements

Assign weights to categories:	Weights:
Understanding of Project & Requirements	5
Approach/Methodology	3
Project Timelines & Cost	4
Experience & Stature	2
Ability to Complete the Project	4
Overall Assessment	2

Mandatory Criteria	Comments		Evaluation
	Strengths	Weaknesses	Score (1 or 2 causes immediate disqualification)
Bid is within Budget	Budget = $12,000 Bid = $11,275		5

Criteria	Comments		Evaluation		
	Strengths	Weaknesses	*Score x*	*Weight =*	Weighted Score
Understanding of Project & Requirements	Telephone survey proposed, matches objective of validity	Limited depth of interviewing in telephone survey	3	5	15
Approach/ Methodology	Quality control measures documented	Non-standard quality control measures	4	3	12
Project Timelines & Costs	Well within budget boundary	Timelines are not detailed, may be some risk of late delivery of results	3	4	12
Experience & Stature	Firm is well-known in this market	Firm has not completed comparable project	3	2	8
Ability to Complete the Project	Firm has large professional team	Firm has larger client that may distract resources during our project	2	4	8
Overall Assessment	Firm principals present well, understand project	Some concerns about importance of other clients	3	2	6
Additional Criterion	None				
				Overall Weighted Score:	61

APPENDIX B - Scale Response Questions

The following four step process is offered to researchers to assist in the development of response scale questions:

STEP 1: Develop a distinct list of items to be measured.

- ❒ Determine and clarify the concepts, ideas or theories to be measured.
- ❒ Determine the level of specificity or generality required from the results to address the business need being addressed.
- ❒ Determine whether items of concepts, ideas or theories being measured are distinct (otherwise respondents may experience challenges in responding to the questions).
- ❒ The items in the list should not be ambiguous.
- ❒ Avoid lengthy wording that compromises clarity (though not at the expense of meaning).
- ❒ Avoid multiple negatives.
- ❒ Avoid double-barreled items where the items convey 2 or more ideas.
- ❒ Avoid ambiguous pronoun references.
- ❒ Use both positively and negatively worded items to avoid bias where respondents are inclined to affirm items regardless of their content (however, there may be a trade-off between avoiding bias and creating confusion).

STEP 2: Determine the measurement format.

- ❒ Measurement formats (e.g. satisfaction, agreement, interested, etc.) should be compatible with the items generated for the question.

- ❒ The following presents aspects of scale portions that researchers should consider when deciding upon an appropriate measurement format:

  Number of categories - The number of categories or options selected by the researcher should provide sufficient discrimination within the scale. In other words, the higher the number of categories or options, the finer the distinctions available for analysis. However, shorter scales have the advantage that they are less of a burden on respondents. It is important for researchers to consider whether respondents will find the distinctions relevant and meaningful (e.g. can the respondent actually distinguish a difference between somewhat agree and slightly agree?).

4-Point Scale	*7-Point Scale*
• Strongly agree	• Strongly agree
• Agree	• Somewhat agree
• Disagree	• Slightly agree
• Strongly disagree	• Neither agree nor disagree
	• Slightly disagree
	• Somewhat disagree
	• Strongly disagree

Balanced or unbalanced scales - The researcher must decide whether the scale should be balanced or unbalanced. The balanced scale provides an equal number of response categories on both ends of the continuum. This is the most common form of rating and generally satisfies the requirements for interval measurement. Conversely, an unbalanced scale is used when the direction of response is generally known and finer distinctions on one end of the continuum are desired. Although unbalanced scales are sometimes used in social and marketing research, they are generally not recommended because the question has the potential to bias the respondent and it may be difficult to analyze and interpret the data.

Balanced Scale	*Unbalanced Scale*
• Strongly agree	• Very strongly agree
• Somewhat agree	• Strongly agree
• Neither agree nor disagree	• Somewhat agree
• Somewhat disagree	• Somewhat disagree
• Strongly disagree	• Disagree

Odd or Even Number of Categories - When balanced scales are used, researchers must determine whether the scale will have an odd or even number of categories (the use of odd number of categories typically designates the middle category as 'neutral' such as neither agree nor disagree, except in the application of an unbalanced scale). The decision to use either odd or even number of response categories usually depends on the researcher's assumptions about respondents' mindset. Researchers who advocate even-numbered categories generally propose that respondents may use the neutral options to hide their opinion and they should be forced to indicate some degree of opinion. Advocates of odd-numbered categories suggest that respondents can be neutral in their opinion or perspectives and, thus, should be allowed to state their ambivalence.

4-Point Scale

- Strongly agree
- Agree
- Disagree
- Strongly disagree

5-Point Scale

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree

The following are general considerations for using odd or even number of categories:

- Even Number of Categories (such as a 4 point scale) - Is appropriate in situations where a 'forced' choice is necessary. However, it should be noted that forced-choice may increase non-response rate.
- Odd Number of Categories (such as a 5 point scale) - Is appropriate if a neutral opinion is an appropriate response. But, the researcher may have difficulties interpreting the neutral proportion of responses.

STEP 3: Have question items and response scales reviewed by survey committee members who have survey expertise.

❒ Issues that should be considered when questions and response scales are being reviewed, include:

- Relevance of each item and what it is intended to measure.
- Clarity and conciseness of items.
- The potential for response bias.

STEP 4: Evaluate response scale questions in a survey pre-test.

❒ De-brief interviewers or pilot-test respondents to determine whether items are clear, understandable, and distinct in meaning.

❒ Review the performance of items to assess variances in responses (high variance of scale items is desirable).

❒ If there are concerns about a response scale question, try alternatives in the pre-test.

APPENDIX C - Call Record Management Form

Interviewer # _____ **Date:**_____

(Project Name)

Phone #	Call 1	Call 2	Call 3	Final Status	Complete Number
555-1535					
555-9812					
555-9383					
555-8175					
555-2978					
555-8304					
555-5678					
555-3497					
555-0987					
555-6821					
555-4093					
555-0112					
555-7891					
555-8374					
555-5930					
555-2947					
555-4930					
555-0081					
555-4581					
555-7623					
555-6611					
555-9641					
555-1398					
555-7549					
555-4760					
555-3322					
555-8861					
555-2875					
555-6830					
555-1881					

	Total
B - Busy	
NA - No Answer	
AM - Answering Machine	
CB - Arranged Call Back	
C - Completed	
R - Refused	
Fax - Fax	
I - Incomplete	
T - Terminated	
NQ - Not Qualified	
NIS-Not in Service	
Bus - Business #	
L-Language	
Total Calls made	

NOTES:

APPENDIX C - Call Record Management Form

Interviewer # _____ Date:_____

(Project Name)

Phone #	Call 1	Call 2	Call 3	Final Status	Complete Number
555-1535					
555-9812					
555-9383					
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555-8304					
555-5678					
555-3497					
555-0987					
555-6821					
555-4093					
555-0112					
555-7891					
555-8374					
555-5930					
555-2947					
555-4930					
555-0081					
555-4581					
555-7623					
555-6611					
555-9641					
555-1398					
555-7549					
555-4760					
555-3322					
555-8861					
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I - Incomplete	
T - Terminated	
NQ - Not Qualified	
NIS-Not in Service	
Bus - Business #	
L-Language	
Total Calls made	

NOTES:

APPENDIX D - FOIP Best Practices Checklist

(Source: *Freedom of Information and Protection of Privacy: Conducting Surveys: A Guide to Privacy Protection*, ISBN 0-7785-2097-8, Government of Alberta, revised August 2003)

Planning and Design

- Clearly define the issues you wish to address through survey research. This will help limit collection of information to that which is necessary to address the issues.
- If the survey is going to gather large amounts of personal information, very sensitive personal information and/or retain personal information for a length of time, a privacy impact assessment should be performed.
- Ensure staff has a clear understanding of the privacy issues before beginning survey research.
- If using an external contractor for any stage of the project, have a written agreement or contract in place ensuring compliance with the FOIP Act.
- Whenever possible, design the survey so that no personal information is collected.
- If the survey cannot be carried out anonymously, design it so that personal information is transformed before use or disclosure.
- If using coded surveys, ensure that procedures are in place to minimize the extent of access to both sets of data.
- Make sure the survey participants are informed of the purpose of the survey and how you will be using any personal information that may be transformed.

Sample Selection

- When you know in advance that client information will be used to select a survey sample, provide notice of this use at the time of collection.
- When you have not anticipated use of personal information to select a survey sample at the time of collection, use that information only if the use is consistent with the original purpose of collection or you have individual written consent.
- If you are asking the Information and Privacy Commissioner for permission to collect personal information, complete a privacy impact assessment to demonstrate the need.
- Before sharing data to select a survey sample make sure there is authority to collect and disclose, and a personal information sharing agreement is in place.
- If possible, avoid indirect collection of personal information to obtain a survey research sample. Instead, have the public body, or other institution that maintains the personal information, contact potential participants directly on your behalf.

- Before sharing data or contacting potential research participants on behalf of another public body, you should ensure that you have the authority to use or disclose the personal information for these purposes under **sections 39 or 40(1)** of the FOIP Act.

- When contacting potential research participants on behalf of another public body, ensure that replies go directly to the public body conducting the survey.

- Any collection of personal information done on behalf of a public body requires a notice of collection (see Appendix 2).

Data Collection

- If personal information is collected for a purpose not directly related to the survey, keep the two types of information separate and the use and disclosure of this information should be made clear.

- Ensure you have the authority to collect the personal information required for the survey under **section 33** of the FOIP Act.

- Before collecting personal information indirectly ensure you have the authority to do so under **section 34(1) or (3)** of the FOIP Act.

- Limit the amount of personal information collected to what is strictly necessary.

- When contacting potential survey participants, take steps to protect their privacy by not disclosing to third parties the name of your institution or the reason for contacting the potential survey participants.

- Unless the survey is done anonymously, provide assurances of confidentiality only with the proviso that disclosure of personal information may occur if required by statute or the courts.

- When collecting personal information to conduct a survey, provide notice of collection in compliance with **section 34(2)** of the FOIP Act.

- Provide survey participants with sufficient information about the survey so that they understand the use being made of their personal information.

- Whenever possible, collect personal information directly from the subject individual.

- Obtain prior written consent from each individual if the intent is to disclose personal information that could identify him or her to those the survey is about.

Data Analysis

- Use and disclose personal information only for the purposes specified to the survey participants at the time of collection.

- Before using personal information for a purpose not specified at the time of collection, obtain the individual's written consent.

Reporting Results

- Report survey results as aggregate information.
- Do not report results of small cells (i.e. 5 or fewer participants).
- Consider other ways of transforming personal information into non-identifiable information.

Records Management

- Whenever possible store personal information separately from the survey responses.
- Keep a record of the fact that a personal information bank is used to select survey samples.
- Ensure that you have a records retention and disposition schedule in place for all records related to the survey and follow it.

APPENDIX E - Error Checks for Satisfaction Surveys

Error Type		Problem	How Error may be Addressed
Sampling errors	**Target population inadequately defined**	**Invalid survey results**	**Re-defined survey population**
	Poor sample frame	**Potential respondents will be missed or inappropriate respondents included**	**Clean and update sample frame**
Data collection errors	**Interviewer errors: - failing to ask questions properly - not following questionnaire flow -leading respondents - improper recording of answers**	**Inaccurate or poor data**	**- proper selection, training and supervision of interviewers**
Respondent errors	**Respondent provide incorrect information**	**Invalid data**	**- ensure questions are worded and formatted properly**
	Respondent lacks required information	**Question omitted or guessed at**	**- allow for uncertainty in question answer (don't know) - ensure proper sample frame is used**
Data administration errors	**Coding errors**	**Invalid and unreliable data**	**- pre-code questionnaires - check coding - train coders**
	Data entry errors	**invalid and unreliable data**	**- use computer software programs customized for data capture -Train data entry staff - Conduct verification of data entry**